Day-Brite CFI
by Signify

Industrial

HBY LED High bay

12,000 to 36,000 lumens

LED

Control options available

Day–Brite / CFI HBY LED high bay provides durability in an appealing compact form. With a wide range of lumen packages, optical distributions, and accessories available, this luminaire can be used in many different applications ranging from warehouses and manufacturing facilities to retail outlets and natatoriums.

Project:

Location:

Cat.No:

Type:

Lumens: Qty:

Notes:

Ordering guide

Example: HBY24L840-UNV-M-WT

Family	Lumens (nominal¹)	Color Temperature –	Voltage –	Distribution –	Paint Colors –	Options –
HBY						
HBY	**12L** 12,000 lumens **18L** 18,000 lumens **24L** 24,000 lumens **30L²** 30,000 lumens **36L²** 36,000 lumens Other lumen packages may be ordered in increments of 1000lm up to 36000 lumens.	**835** 3500K (CRI 80) **840** 4000K (CRI 80) **850** 5000K (CRI 80)	**UNV** Universal voltage 120-277V **120** 120V **208** 208V **240** 240V **277** 277V **347²** 347V **480²** 480V	**N** Narrow **M** Medium **W** Wide **A** Aisle	**BZ** Dark Bronze **WT** White **BK** Black **AL** Silver Aluminum	**WP6**³,⁶ Wired 6' 16/3 Cord & NEMA Twist Lock Plug **WP6D**³,⁶ Wired 6' 16/3 Cord & NEMA Twist Lock Plug for Line Voltage and Wired 6' 16/3 Cord & Plug for Dimming Control **WC6D**⁶ Wired 6' 16/3 Cord for Line Voltage and Wired 6' 16/3 Cord for Dimming Control **WC6/4**⁶ Wired 6' 16/4 cord for line voltage plus unswitched hot for EM **WC6/5**⁶ Wired 6' 18/5 cord for line voltage plus 0-10V dimming **WC6/6**⁶ Wired 6' 18/6 cord for line voltage plus unswitched hot for EM plus 0-10V dimming **BSL10LST** Factory wired Philips Bodine integral emergency pack, nominal 1100 to 1400 lumens **MD360W**⁷ Wet location occupancy sensor, (ON/OFF) **MD360WD**⁷ Wet location occupancy sensor, (ON/DIM to 10%) **SWZCSH**⁵ Interact Pro scalable high bay sensor with integral daylight & occupancy sensing, advanced grouping with dwell time **SNH200**⁵ Integral EasySense occupancy & daylight sensor, with advanced SpaceWise type wireless grouping **FGS** Solite stippled tempered glass lens **XTM** Extreme Environment (see specification notes for details) **NFZ** NSF listed for Non-Food Zone **(Factory wired 6' 16/3 black cord is standard)**

Footnotes

1   Nominal delivered lumens at 25°C ambient
2   Not available with BSL10LST option
3   Must specify line voltage
4   Do not use with XTM option luminaire in natatoriums or other corrosive environments.
5   High bay motion detector. Motion sensing zone is extremely limited if used below 15' mounting height.
6   6' is standard cord length. For optional 10', 15', or 20' cord length, replace the "6" in the option code with desired length.
7   Not available with SWZCSH or SNH200 option

General Notes

· All options factory installed.
· All accessories are field installed.
· Many luminaire components, such as reflectors, refractors, lenses, sockets, lampholders, and LEDs are made from various types of plastics which can be adversely affected by airborne contaminants. If sulfur based chemicals, petroleum based products, cleaning solutions, or other contaminants are expected in the intended area of use, consult factory for compatibility.

Wiring Notes

· Standard cords have 3 wires. Consult factory for other cord options.

Accessories (order separately, see last page for details)

· **HCH5-SNAP** ⁴	5' cables with snap hooks
· **HCH10-SNAP** ⁴	10' cables with snap hooks
· **HCH15-SNAP**⁴	15' cables with snap hooks
· **HBY-ADJHGR** ⁴	Adjustable hanger
· **HBY-ADJHGR-XTM**	Adjustable hanger for Extreme Environment
· **HBY-IND** ⁴	Hanging bracket pair for indirect suspension
· **HBY-IND-XTM**	Hanging bracket pair for indirect suspension for Extreme Environments

interact ready.

ETL LISTED

HBY LED high bay

12,000, 18,000, 24,000, 30,000 & 36,000 lumens

Application

• This luminaire can be used to illuminate manufacturing, warehousing, gymnasiums, arenas and many other large indoor spaces with control and precision. **Construction/Finish**

• Die cast aluminum housing provides excellent thermal transfer to extend component life.

• Tempered glass lens with molded gasket seals the optical compartment.

• Cable/chain mounting capability is standard (ordered separately or furnished by others). Accessories are available for other mounting methods.

• Polyester powder finish on all die cast parts for excellent impact and corrosion resistance.

• Each unit comes standard with 6' 16/3 wired cord (see options for other wiring configurations).

• LED light engines and drivers are field replaceable.

• 5 Year Limited Warranty, www.signify.com/warranties

• Components are RoHS compliant.

• L70 LED predicted lumen maintenance >100,000 hours

• cETLus listed to UL 1598 standards. Suitable for use in wet locations.

• NSF Certified option for Non-FoodZone installation.

• Standard construction is IP65.

• Dimming drivers are standard. Control is 0-10V DC. Note: proper cord options required to use dimming controls.

• Optional motion detector.

• DLC Listed. Please check the DLC

• 6KV surge protection standard.

• XTM Extreme Environment option provides extra protection from heat and chemicals. Finish coating, stainless steel hardware and LED upgrades allow use in areas such as natatoriums.

SNH200 EasySense

• Philips field apps allow programming of occupany & daylight sensing parameters and fine-tuning of light levels during installation. It can also be used for grouping of fixtures.

• Download "Philips field apps" from the Google Play Store.

• Register for the commissioning app at http://registration.componentcloud.philips.com/appregistration/.

• The app works on certain Android phones with NFC or IR. See Recommended Phones and the EasySense App User Manual in the download section at http://www.usa.lighting.philips.com/products/lighting-components/easysense and follow the "View Downloads" link to register for access to the download area. Navigate to Connected-Lighting-Components and then Philips-EasySense-Sensors to find downloads.

Interact Pro scalable sensor for Foundation, Advanced & Enterprise tiers (SWZCSH and an evolution of SpaceWise)

• SWZCSH is a connected sensor with integral occupancy and daylight sensing and supports wireless mesh connectivity.

• The sensor works in the Foundation mode (similar to SpaceWise) when configured without a gateway or in an Interact Pro Advanced or Enterprise mode if a compatible gateway is used.

• Interact Pro includes an App, a portal and a broad portfolio of wireless luminaires, lamps and retrofit kits all working on the same system.

• Startup is implemented via Interact Pro App (Android or iPhone) & BlueTooth connectivity. The App provides flexibility to choose between a gateway or non gateway mode for setup.

• Setup with the gateway requires wired internet access to the gateway. It is possible to add a gateway at a later point.

• Prepare project configuration steps remotely and use IRT9015 remote

onsite to identify and group devices together.

• Compatible with:

– UID8451/10 wireless dimmer switch

– SWS200 wireless scene switch

– Battery powered IP42 presence sensor OCC sensor IA CM WH 10/1

– Battery powered IP42 presence & daylight sensor OCC-DL sensor IA CM IP42 WH

– LCN3110/05 battery powered IP65 presence sensor OCC sensor IA CM IP65 WH

– LCN3120/05 battery powered IP65 presence & daylight sensor OCC-DL sensor IA CM IP65 WH

• For more information on Interact Pro visit: www.interact-lighting.com/interactproscalablesystem

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	Interact Pro scalable system		
	Foundation	Advanced	Enterprise
Dimming, grouping, and zoning	✓	✓	✓
Bluetooth and ZigBee enabled	✓	✓	✓
Motion sensing and daylight harvesting	✓	✓	✓
Integration with 0-10V and phase dimming fixtures	✓	✓	✓
Code compliance	✓	✓	✓
Granular dimming and dwell time	✓	✓	✓
Energy reporting and monitoring		✓	✓
Scheduling		✓	✓
Demand response		✓	✓
BMS integration (BACnet)			✓
Floor plan visualization			✓
IoT sensors for wellness			✓
IoT Apps for productivity			✓

Currently supported maximum system size

To be able to design the lighting system correctly for the customer, it is important to know the prime characteristics of the system, its possibilities and limitations.

System level	
Total number of gateways	Unlimited
Total number of devices	200 per network
· luminaires with integrated sensors	150
· smart TLEDS	150
Total number of ZGP devices (sensors and switches)	50
· sensors	30
· switches	50
· zones and groups	64
Group level	
Recommended number of lights	40 (recommended 25)
Number of ZGP devices	5
Number of scenes	16
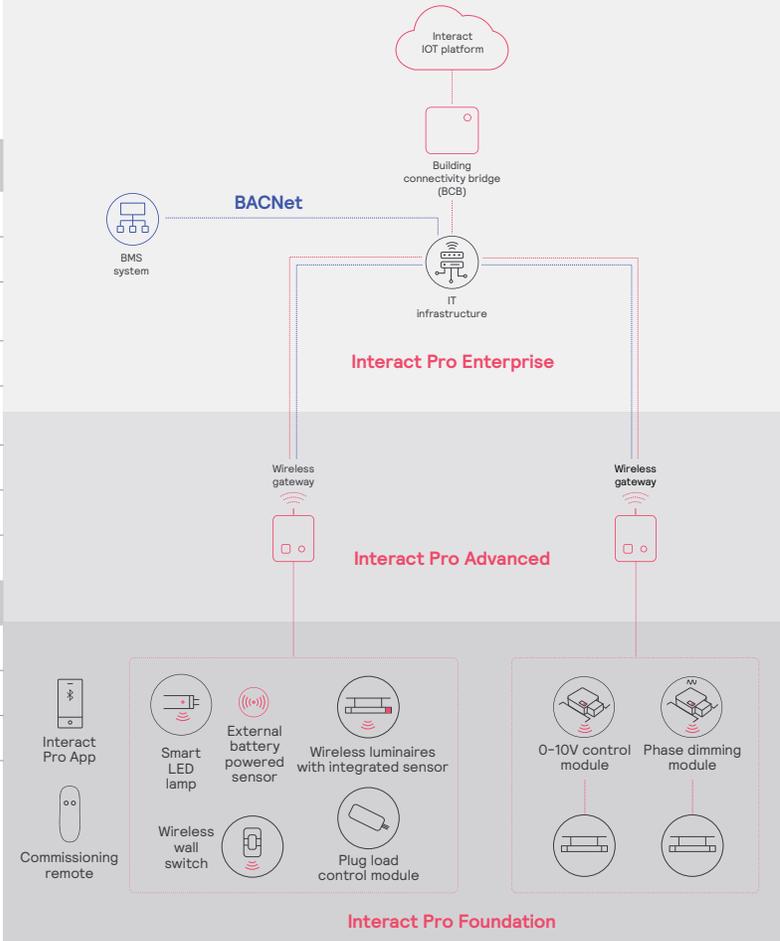
HBY LED high bay

12,000, 18,000, 24,000, 30,000 & 36,000 lumens

Dimensions

19-1/4"
(489 mm)

23-5/8"
(600 mm)

3-1/2"
(89 mm)
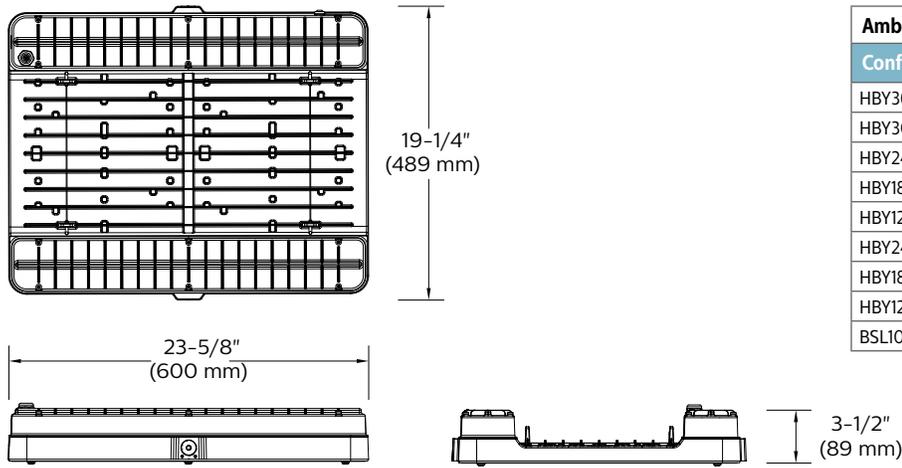
Ambient Temperature Data	
Configuration	**Ambient**
HBY36L - UNV	-20°C to 45°C
HBY30L - UNV	-20°C to 55°C
HBY24L - UNV	-20°C to 55°C
HBY18L - UNV	-20°C to 55°C
HBY12L - UNV	-20°C to 55°C
HBY24L - 347/480V	-20°C to 50°C
HBY18L - 347/480V	-20°C to 50°C
HBY12L - 347/480V	-20°C to 55°C
BSL10LST option	0°C to 50°C

Accessories

HCH-SNAP
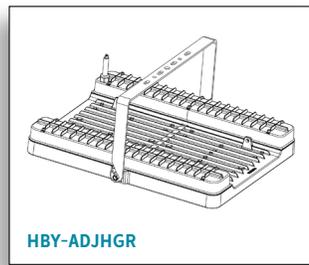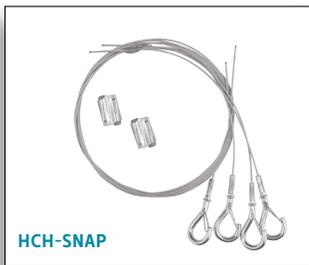
HBY-ADJHGR

Accessory Catalog Code	**Description**
HCH5-SNAP	5' hanging pair of cables with snap hooks
HCH10-SNAP	10' hanging pair of cables with snap hooks
HBY-ADJHGR	Adjustable hanger kit -galvanized steel

HBY LED high bay

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Photometry

HBY LED high bay, Aisle Distribution, 18,000 nominal delivered lumens

Catalog No.	HBY18L840-UNV-A
Test No.	39538
S/MH	2.5
Lamp Type	LED
Lumens	18,628
Input Watts	136
Efficacy	137

Comparative yearly lighting energy cost per 1000 lumens – **$1.75** based on 3000 hrs. and $.08 pwr KWH.

The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candlepower

Angle	End	45	Cross	-45
0	4328	4328	4328	4328
5	4271	4395	4466	4395
15	4083	4788	5317	4788
25	3653	5335	6542	5335
35	2919	5861	7886	5861
45	1929	6094	8793	6094
55	633	5514	8258	5514
65	410	1418	4464	1418
75	184	205	493	205
85	30	27	37	27
95	0	0	0	0
105	0	0	0	0
115	0	0	0	0
125	0	0	0	0
135	0	0	0	0
145	0	0	0	0
155	0	0	0	0
165	0	0	0	0
175	0	0	0	0

Light Distribution

Degrees	Lumens	% Luminaire
0-30	4202	22.6
0-40	7739	41.5
0-60	16317	87.6
0-90	18627	100.0
0-180	18628	100.0

Average Luminance

Angle	End	45°	Cross
45	9692	30621	44187
55	3923	34162	51156
65	3451	11922	37530
75	2525	2813	6770
85	1207	1101	1508

Coefficients of Utilizaton

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

pcc	80			70			50	
pw	70	50	30	70	50	30	50	30
RCR								
0	119	119	119	116	116	116	111	111
1	110	106	102	107	103	100	98	96
2	100	93	86	98	91	85	87	82
3	91	81	73	89	80	72	77	70
4	83	71	63	81	70	62	68	61
5	76	63	54	74	62	54	60	53
6	70	56	47	68	55	47	54	46
7	64	51	42	63	50	41	48	41
8	59	46	37	58	45	37	44	36
9	55	42	33	54	41	33	40	32
10	52	38	30	50	37	30	36	29

HBY LED high bay, Medium Distribution, 18,000 nominal delivered lumens

Catalog No.	HBY18L840-UNV-M
Test No.	39535
S/MH	1.4
Lamp Type	LED
Lumens	18,729
Input Watts	136
Efficacy	138

Comparative yearly lighting energy cost per 1000 lumens – **$1.74** based on 3000 hrs. and $.08 pwr KWH.

The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candlepower

Angle	End	45	Cross	-45
0	10992	10992	10992	10992
5	10894	11060	11107	11060
15	11006	11387	11551	11387
25	9515	11218	12414	11218
35	6966	8827	9647	8827
45	2722	4308	3499	4308
55	751	486	462	486
65	463	276	322	276
75	189	157	180	157
85	61	60	64	60
95	0	0	0	0
105	0	0	0	0
115	0	0	0	0
125	0	0	0	0
135	0	0	0	0
145	0	0	0	0
155	0	0	0	0
165	0	0	0	0
175	0	0	0	0

Light Distribution

Degrees	Lumens	% Luminaire
0-30	9339	49.9
0-40	14604	78.0
0-60	18155	96.9
0-90	18723	100.0
0-180	18729	100.0

Average Luminance

Angle	End	45°	Cross
45	13681	21646	17583
55	4654	3013	2861
65	3892	2320	2708
75	2593	2151	2475
85	2467	2430	2597

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

pcc	80			70			50	
pw	70	50	30	70	50	30	50	30
RCR								
0	119	119	119	116	116	116	111	111
1	112	109	106	110	107	104	103	101
2	105	100	95	103	98	93	94	91
3	99	91	85	97	90	84	87	82
4	93	84	77	91	82	76	80	75
5	87	77	70	85	76	69	74	68
6	81	71	64	80	70	63	68	62
7	76	65	58	75	65	58	63	57
8	72	61	54	70	60	53	59	53
9	68	56	50	66	56	49	55	49
10	64	53	46	63	52	46	51	45

HBY LED high bay, Narrow Distribution, 18,000 nominal delivered lumens

Catalog No.	HBY18L840-UNV-N
Test No.	39528
S/MH	0.8
Lamp Type	LED
Lumens	18,676
Input Watts	136
Efficacy	137

Comparative yearly lighting energy cost per 1000 lumens – **$1.75** based on 3000 hrs. and $.08 pwr KWH.

The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candlepower

Angle	End	45	Cross	-45
0	22170	22170	22170	22170
5	22002	22046	21880	22046
15	21538	20143	18829	20143
25	17376	14592	12008	14592
35	5368	3879	3142	3879
45	1025	556	565	556
55	843	424	433	424
65	347	321	346	321
75	371	171	213	171
85	87	76	66	76
95	0	0	0	0
105	0	0	0	0
115	0	0	0	0
125	0	0	0	0
135	0	0	0	0
145	0	0	0	0
155	0	0	0	0
165	0	0	0	0
175	0	0	0	0

Light Distribution

Degrees	Lumens	% Luminaire
0-30	14259	76.3
0-40	17090	91.5
0-60	18028	96.5
0-90	18669	100.0
0-180	18676	100.0

Average Luminance

Angle	End	45°	Cross
45	5152	2796	2840
55	5224	2625	2685
65	2920	2695	2908
75	5089	2342	2917
85	3551	3103	2707

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

pcc	80			70			50	
pw	70	50	30	70	50	30	50	30
RCR								
0	119	119	119	116	116	116	111	111
1	113	110	108	111	108	106	104	102
2	107	102	98	105	101	97	97	94
3	102	95	90	100	94	89	91	88
4	97	89	84	95	88	83	86	82
5	92	84	78	91	83	77	81	76
6	88	79	73	86	78	73	77	72
7	84	74	69	82	74	68	73	67
8	80	70	65	79	70	64	69	63
9	76	67	61	75	66	61	65	60
10	73	63	58	72	63	57	62	57

HBY　LED high bay

12,000, 18,000, 24,000, 30,000 & 36,000 lumens

HBY LED high bay, Wide Distribution, 18,000 nominal delivered lumens

Catalog No.	HBY18L840-UNV-W
Test No.	39525
S/MH	2.2
Lamp Type	LED
Lumens	18,092
Input Watts	136
Efficacy	133

Comparative yearly lighting energy cost per 1000 lumens – **$1.80** based on 3000 hrs. and $.08 pwr KWH.

The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candlepower

Angle	End	45	Cross	-45
0	3954	3954	3954	3954
5	4116	4096	4009	4096
15	4919	4793	4425	4793
25	6468	6376	5876	6376
35	5124	5951	7157	5951
45	4723	5797	6778	5797
55	3429	4372	4931	4372
65	692	993	636	993
75	260	245	246	245
85	71	67	65	67
95	0	0	0	0
105	0	0	0	0
115	0	0	0	0
125	0	0	0	0
135	0	0	0	0
145	0	0	0	0
155	0	0	0	0
165	0	0	0	0
175	0	0	0	0

Light Distribution

Degrees	Lumens	% Luminaire
0-30	4621	25.5
0-40	8452	46.7
0-60	16579	91.6
0-90	18086	100.0
0-180	18092	100.0

Average Luminance

Angle	End	45°	Cross
45	23736	29129	34058
55	21243	27082	30550
65	5817	8351	5348
75	3575	3357	3370
85	2878	2711	2662

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

pcc	80			70			50	
pw	70	50	30	70	50	30	50	30
RCR								
0	119	119	119	116	116	116	111	111
1	110	106	103	108	104	101	100	97
2	101	94	88	99	92	86	89	84
3	93	83	75	90	81	74	78	72
4	85	73	65	83	72	64	70	63
5	78	65	57	76	64	56	62	55
6	72	59	50	70	58	49	56	48
7	66	53	44	64	52	44	50	43
8	61	48	39	60	47	39	46	38
9	57	43	35	55	43	35	42	34
10	53	40	32	52	39	32	38	31

Photometric Test List

Catalog No.	Test No.	Delivered Lumens	Input Watts*	Efficacy
HBY12L840-UNV-N	39527	12642	86	148
HBY12L840-UNV-M	39536	12533	85	147
HBY12L840-UNV-W	39526	12403	86	145
HBY12L840-UNV-A	39537	12518	86	146
HBY18L840-UNV-N	39528	18676	136	137
HBY18L840-UNV-M	39535	18729	136	138
HBY18L840-UNV-W	39525	18092	136	133
HBY18L840-UNV-A	39538	18628	136	137
HBY24L840-UNV-N	39529	24261	188	129
HBY24L840-UNV-M	39534	24281	187	130
HBY24L840-UNV-W	39523	23844	187	128
HBY24L840-UNV-A	39539	23914	187	128
HBY30L840-UNV-N	39531	30155	225	134
HBY30L840-UNV-M	39532	30386	226	135
HBY30L840-UNV-W	39524	29985	226	133
HBY30L840-UNV-A	39541	30094	225	134
HBY36L840-UNV-N	39530	35912	280	128
HBY36L840-UNV-M	39533	36115	280	129
HBY36L840-UNV-W	39522	35626	280	127
HBY36L840-UNV-A	39540	36038	280	129
* 347V and 480V models have the same input watts.				

Buy American Act of 1933 (BAA):

This product is manufactured in one of our US factories and, as of the date of this document, this product was considered a commercially available off-the-shelf (COTS) item meeting the requirements of the BAA. This BAA designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies. Prior to ordering, please visit www.signify.com/baa to view a current list of BAA-compliant products to confirm this product's current compliance.

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