

LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO

Report Number: P1219807

Luminaire Tested: HLC6FS1E-24P-4000K

Issue Date: 12/22/2025

Tested By:

Approved By:



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Test Information

Test Method: LM-79-2019
Report Number: P1219807
Test Lab: INNOVATION CENTER
Issue Date: 12/22/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: HLC6FS1E-24P-4000K
Description: 6" Surface Mount LED Disk Light

Light Source:
Ballast/Driver: -

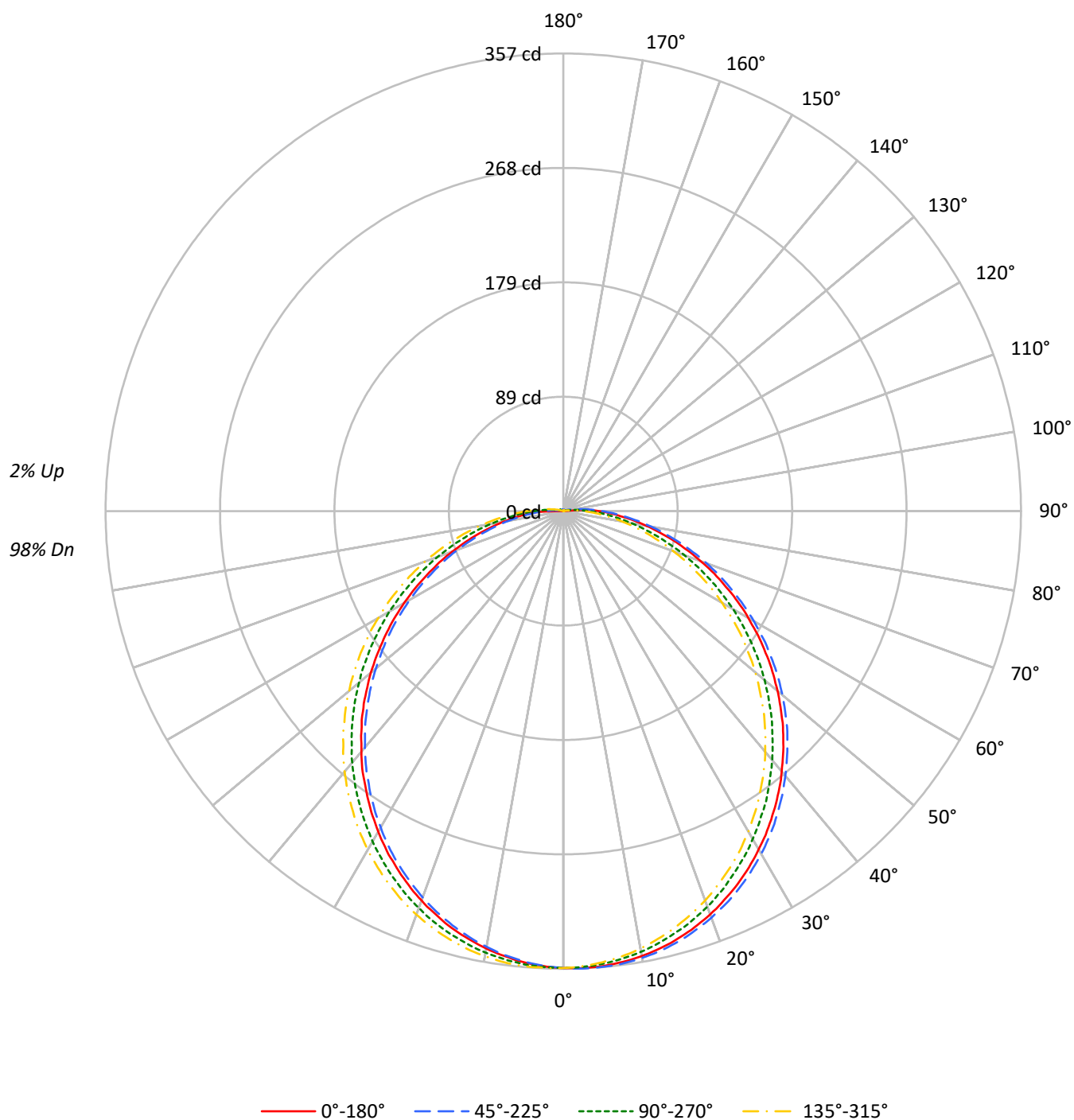
Summary

Lumens per Lamp: 939.5 (1 lamp)
Luminaire Lumens: 1060.0 lumens
Efficiency: 112.8%
Efficacy: 71.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.36
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 14.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: >0.9
Total Harmonic Distortion (THDi): <20
Frequency (hertz): 60
Stabilization Time: HR
Operation Time: HR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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CATALOG NUMBER: HLC6FS1E-24P-4000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10		0
RCR																					
0	134	134	134	134	130	130	130	130	124	124	124		118	118	118		113	113	113		111
1	121	115	110	105	118	112	108	103	107	103	100		102	99	96		98	95	93		90
2	110	100	92	85	107	98	90	84	93	87	82		89	84	79		85	81	77		75
3	100	88	78	70	97	86	77	70	82	74	68		78	72	67		75	70	65		63
4	91	77	67	59	89	76	66	59	73	64	58		70	63	57		67	61	56		53
5	84	69	59	51	81	68	58	51	65	57	50		63	55	49		60	54	48		46
6	78	62	52	45	75	61	51	44	59	50	44		57	49	43		55	48	43		40
7	72	56	46	39	70	55	46	39	53	45	39		52	44	38		50	43	38		35
8	67	51	42	35	65	51	41	35	49	41	35		47	40	34		46	39	34		32
9	63	47	38	32	61	46	38	31	45	37	31		44	36	31		42	36	31		28
10	59	44	35	29	57	43	34	28	42	34	28		40	33	28		39	33	28		26

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	19538	19538	19538	19538
5°	19602	19508	19436	19524
10°	19617	19433	19288	19461
15°	19591	19302	19103	19364
20°	19532	19158	18855	19217
25°	19435	18945	18582	19041
30°	19294	18699	18269	18838
35°	19147	18457	17915	18585
40°	18964	18148	17533	18327
45°	18800	17839	17134	18025
50°	18618	17483	16716	17731
55°	18408	17118	16219	17443
60°	18288	16764	15700	17159
65°	18173	16396	15216	16850
70°	18304	16141	14746	16734
75°	18915	16097	14488	16839
80°	20804	16984	14964	18058
85°	28242	21952	18681	23902

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°

Vertical Angle: 89°

Luminance: 116850 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	33.7	3.2	3.6
10°-20°	96.1	9.1	10.2
20°-30°	144.8	13.7	15.4
30°-40°	173.2	16.3	18.4
40°-50°	178.6	16.9	19.0
50°-60°	161.9	15.3	17.2
60°-70°	127.4	12.0	13.6
70°-80°	83.3	7.9	8.9
80°-90°	41.3	3.9	4.4
90°-100°	12.8	1.2	1.4
100°-110°	2.6	0.2	0.3
110°-120°	1.3	0.1	0.1
120°-130°	1.0	0.1	0.1
130°-140°	0.8	0.1	0.1
140°-150°	0.6	0.1	0.1
150°-160°	0.4	0.0	0.0
160°-170°	0.1	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	274.6	25.9	29.2
0°-40°	447.8	42.2	47.7
0°-60°	788.3	74.4	83.9
0°-90°	1040.3	98.1	110.7
90°-120°	16.7	1.6	1.8
90°-150°	19.2	1.8	2.0
90°-180°	20.0	1.9	2.1
0°-180°	1060.0	100.0	112.8

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	356	356	356	356	356	
5°	356	354	353	355	356	34
15°	345	340	337	341	345	97
25°	321	313	307	315	321	148
35°	286	276	268	278	286	179
45°	242	230	221	232	242	187
55°	193	179	170	182	193	172
65°	140	126	117	130	140	139
75°	89	76	68	80	89	94
85°	45	35	30	38	45	41
90°	28	21	0	23	28	16
95°	0	10	0	12	0	3
105°	0	2	0	3	0	0
115°	0	3	0	3	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	1	0	0	0
155°	0	0	1	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	356.4	356.4	356.4	356.4	356.4	356.4	356.4	356.4	356.4	356.4	356.4
1°	356.6	356.8	356.8	356.8	356.3	356.2	356.1	356.0	356.1	356.0	355.9
2°	356.8	357.1	357.1	357.2	356.0	355.9	355.7	355.5	355.6	355.3	355.3
3°	356.7	357.1	357.2	357.5	355.6	355.4	354.9	355.1	354.9	354.5	354.6
4°	356.5	357.0	357.2	357.5	355.2	354.8	354.1	354.1	354.2	353.7	353.7
5°	356.2	356.9	356.9	357.4	354.5	353.8	353.2	353.2	353.2	352.6	352.5
6°	355.7	356.6	356.6	357.3	353.7	352.9	352.0	352.2	352.2	351.5	351.3
7°	355.0	356.1	356.3	357.0	352.7	351.8	351.0	351.0	350.8	349.8	350.0
8°	354.4	355.5	355.6	356.4	351.6	350.7	349.6	349.5	349.5	348.4	348.7
9°	353.5	354.6	354.9	355.8	350.5	349.3	348.2	348.0	348.1	346.6	346.8
10°	352.4	353.7	353.9	355.1	349.1	347.9	346.5	346.4	346.5	344.9	345.1
11°	351.3	352.8	352.9	354.2	347.5	346.2	344.7	344.4	344.8	343.2	343.2
12°	350.0	351.6	351.8	353.3	345.9	344.4	342.8	342.6	342.7	341.1	341.2
13°	348.6	350.3	350.5	352.2	344.1	342.4	340.8	340.5	340.7	338.9	339.0
14°	347.1	348.9	349.0	351.0	342.3	340.4	338.6	338.5	338.8	336.7	336.9
15°	345.2	347.4	347.5	349.5	340.1	338.2	336.5	336.2	336.6	334.3	334.4
16°	343.4	345.4	345.8	347.6	338.3	336.2	333.8	334.0	334.2	332.0	331.8
17°	341.5	343.7	343.8	346.0	336.0	333.8	331.4	331.5	331.5	329.1	329.2
18°	339.3	341.7	341.8	344.2	333.4	331.1	328.8	328.5	328.7	326.2	326.5
19°	337.1	339.6	339.8	342.2	331.0	328.4	325.9	326.1	326.3	323.6	323.7
20°	334.8	337.5	337.6	340.1	328.4	325.5	323.3	323.1	323.2	320.8	320.7
21°	332.4	335.2	335.1	337.9	325.7	322.8	320.3	320.3	320.4	317.5	317.3
22°	329.6	332.7	332.7	335.7	322.6	319.8	317.0	317.0	317.2	314.2	314.3
23°	326.9	329.8	330.2	333.0	319.9	316.9	313.8	313.9	314.0	310.7	310.8
24°	324.2	327.2	327.5	330.5	316.3	313.3	310.4	310.6	310.7	307.6	307.6
25°	321.3	324.4	324.6	327.8	313.2	309.9	307.3	307.1	307.2	304.2	304.0
26°	318.1	321.6	321.7	325.1	309.8	306.9	303.7	303.7	303.5	300.4	300.6
27°	315.2	318.6	318.8	321.8	306.4	303.1	300.2	300.0	300.4	296.7	296.8
28°	311.6	315.2	315.3	318.9	303.1	299.9	296.5	296.4	296.3	292.9	292.9
29°	308.3	312.1	312.0	315.8	299.4	295.8	292.3	292.4	292.7	289.0	289.0
30°	304.8	308.8	308.8	312.4	295.4	292.1	288.6	288.4	288.6	284.9	284.9
31°	301.3	305.2	305.4	309.1	291.7	288.2	284.4	284.2	284.5	280.6	280.7
32°	297.9	301.6	301.6	305.7	287.7	284.0	280.4	280.3	280.5	276.8	276.8
33°	293.8	298.1	298.1	302.1	283.5	280.1	276.5	276.2	276.4	272.2	272.4
34°	290.0	294.4	294.4	298.1	279.8	276.1	272.1	272.1	272.0	268.2	268.2
35°	286.1	290.0	290.1	294.5	275.8	271.6	267.5	267.6	267.7	263.6	263.7
36°	282.3	286.3	286.2	290.6	271.3	267.4	263.2	263.0	263.1	259.4	259.0
37°	277.9	282.3	282.2	286.4	266.9	262.8	259.0	258.8	259.0	254.8	255.0
38°	273.8	278.0	278.3	282.4	262.3	258.5	254.2	254.2	254.7	250.5	250.1
39°	269.7	273.9	273.7	278.4	258.0	254.0	250.0	249.9	249.8	245.3	245.5
40°	265.0	269.7	269.5	274.3	253.6	249.2	245.1	245.2	245.0	240.6	240.8
41°	260.6	265.0	265.3	269.7	248.8	244.4	240.1	240.0	240.1	235.6	235.8
42°	256.2	260.7	260.6	265.5	244.0	239.6	235.6	235.5	235.7	231.0	231.1
43°	251.8	256.3	256.2	261.1	239.2	235.1	230.7	230.9	230.6	226.4	226.4
44°	247.0	251.8	251.7	256.7	234.5	230.0	225.9	225.8	226.3	221.3	221.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	242.5	247.3	247.2	252.2	230.1	225.6	221.0	221.0	221.0	216.7	216.2
46°	237.9	242.4	242.7	247.2	225.1	220.3	215.7	215.9	216.3	211.5	211.1
47°	232.6	237.8	237.5	242.6	219.8	215.5	210.4	210.8	211.0	206.2	206.2
48°	227.9	233.1	232.7	237.7	215.1	210.3	205.6	205.5	205.7	201.4	200.9
49°	223.1	227.8	228.0	232.9	209.8	205.0	200.5	200.7	200.9	196.2	196.1
50°	218.3	223.0	223.2	228.1	205.0	200.4	195.5	195.5	196.0	191.1	190.8
51°	213.0	218.2	218.0	223.3	199.8	195.2	190.3	190.6	190.4	185.9	185.4
52°	208.1	213.4	213.2	218.0	194.9	189.8	185.1	185.2	185.5	180.1	180.1
53°	203.1	207.9	208.2	213.1	189.7	184.9	179.6	179.9	180.1	175.1	175.1
54°	198.1	203.0	202.7	208.2	184.2	179.5	174.5	174.9	174.5	169.5	170.1
55°	192.6	198.1	197.7	202.7	179.1	174.0	169.6	169.3	169.7	164.9	164.6
56°	187.6	193.0	192.7	197.7	173.7	168.9	164.3	164.4	164.4	159.5	159.5
57°	182.6	187.4	187.7	192.7	168.5	163.9	159.2	158.9	159.3	154.0	154.1
58°	177.0	182.3	182.0	187.6	163.5	158.4	153.6	154.0	153.7	148.5	148.7
59°	171.8	177.3	176.9	182.1	158.1	152.9	148.0	148.4	148.7	143.6	143.2
60°	166.8	171.7	171.8	176.9	152.9	147.4	143.0	142.9	143.2	138.2	138.2
61°	161.6	166.5	166.2	171.7	147.3	142.4	137.8	138.0	137.8	133.2	132.9
62°	156.4	161.3	161.0	166.7	141.9	136.9	132.6	132.8	132.8	127.8	127.7
63°	151.0	156.2	155.8	161.4	136.7	132.1	127.4	127.7	127.6	122.5	122.5
64°	145.8	150.7	150.2	155.7	131.6	126.6	122.0	122.4	122.2	117.2	117.2
65°	140.1	145.4	144.9	150.7	126.4	121.4	116.5	117.0	117.3	112.3	112.2
66°	135.0	140.3	139.8	145.6	120.9	116.0	111.5	111.5	111.8	106.8	106.7
67°	129.9	134.6	134.7	139.8	116.0	111.1	106.4	106.7	107.0	102.2	102.0
68°	124.9	129.4	129.5	134.8	110.4	105.6	101.5	101.7	102.1	97.2	97.2
69°	119.4	124.5	124.1	129.6	105.6	101.0	96.5	96.8	97.2	92.2	92.2
70°	114.2	119.4	119.1	124.6	100.7	96.2	91.3	91.6	92.0	87.3	87.1
71°	109.1	113.8	113.9	119.0	95.8	91.1	86.6	87.0	86.8	82.1	82.0
72°	104.2	108.6	108.8	113.9	90.5	86.1	81.6	82.0	82.3	77.7	77.6
73°	98.9	103.8	103.4	108.8	85.4	81.0	76.8	77.2	77.5	73.2	72.8
74°	94.0	98.9	98.5	103.3	80.8	76.5	72.3	72.6	72.9	68.4	68.3
75°	89.3	93.5	93.6	98.4	76.0	72.1	67.8	68.1	68.4	63.9	63.8
76°	84.1	88.9	88.4	93.6	71.4	67.3	63.5	63.9	63.8	59.4	59.3
77°	79.3	84.0	83.6	88.9	66.9	62.8	59.0	59.4	59.2	55.3	54.9
78°	74.8	79.3	78.9	83.6	62.3	58.3	55.0	55.0	55.2	51.1	51.0
79°	70.2	74.2	74.3	78.8	58.2	54.4	50.8	51.2	51.0	47.2	47.2
80°	65.9	69.7	69.7	74.2	53.8	50.1	46.8	47.2	47.4	43.5	43.2
81°	61.3	65.3	64.9	69.7	49.6	46.3	43.2	43.5	43.3	39.8	39.5
82°	57.1	61.1	60.7	65.3	45.9	42.6	39.4	39.8	39.9	36.1	36.0
83°	53.0	56.5	56.5	60.7	42.3	39.0	35.8	36.2	36.3	32.6	32.5
84°	49.1	52.4	52.0	56.4	38.6	35.4	32.6	32.6	32.7	29.6	29.4
85°	44.9	48.5	48.1	52.3	34.9	31.8	29.2	29.5	29.7	26.8	26.4
86°	41.3	44.7	44.3	48.0	31.7	28.9	26.5	26.7	26.7	24.0	23.7
87°	37.9	40.7	40.7	44.3	28.7	26.1	23.7	24.0	23.9	21.2	21.1
88°	34.6	37.4	37.0	40.6	25.8	23.5	21.1	21.3	21.1	18.8	18.7
89°	31.1	34.0	33.6	37.2	23.1	21.0	18.6	18.8	11.2	16.4	16.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	28.1	30.9	30.5	33.5	20.6	18.4	16.5	16.4	0.0	14.4	14.4
91°	25.4	27.7	27.6	30.4	18.0	16.1	14.4	14.5	0.0	12.6	12.5
92°	22.8	24.9	24.8	27.4	16.0	14.2	12.5	12.7	0.0	11.0	10.9
93°	20.2	22.3	22.0	24.7	13.8	12.3	11.0	11.0	0.0	9.4	9.3
94°	10.8	20.0	19.7	22.1	12.1	10.7	9.4	9.5	0.0	7.8	7.9
95°	0.0	17.6	17.4	19.5	10.4	9.2	8.1	8.1	0.0	6.7	6.7
96°	0.0	15.5	15.1	17.3	9.0	7.9	6.8	6.8	0.0	5.5	5.6
97°	0.0	13.7	13.3	15.2	7.7	6.6	5.7	5.7	0.0	4.7	4.7
98°	0.0	11.9	11.6	13.1	6.6	5.6	4.7	4.7	0.0	3.7	4.0
99°	0.0	10.4	10.1	11.4	5.8	4.8	3.9	3.8	0.3	2.9	3.3
100°	0.0	8.9	8.6	9.8	4.8	4.0	3.1	3.1	0.4	2.3	2.7
101°	0.0	7.6	7.4	8.5	4.2	3.3	2.3	2.3	0.3	1.7	2.3
102°	0.0	6.5	6.3	7.4	3.6	2.7	1.7	1.7	0.3	1.3	1.9
103°	0.0	5.4	5.3	6.4	2.9	2.2	1.2	1.2	0.3	0.9	1.8
104°	0.0	4.4	4.5	5.7	2.4	1.9	0.9	0.8	0.3	0.6	1.7
105°	0.5	3.6	3.7	4.8	2.2	1.6	0.5	0.4	0.3	0.5	1.6
106°	0.2	2.9	3.0	4.1	2.1	1.4	0.6	0.4	0.4	0.7	1.7
107°	0.4	2.3	2.5	3.3	2.0	1.4	0.6	0.4	0.3	0.7	1.7
108°	0.4	1.7	2.1	2.7	1.9	1.4	0.4	0.4	0.3	0.7	1.8
109°	0.3	1.4	1.8	2.4	2.0	1.5	0.7	0.4	0.3	0.8	1.9
110°	0.2	0.8	1.6	2.1	2.2	1.5	0.7	0.4	0.3	0.9	2.1
111°	0.3	0.6	1.5	2.0	2.3	1.6	0.7	0.4	0.4	1.0	2.0
112°	0.2	0.5	1.3	2.0	2.4	1.7	0.8	0.5	0.4	0.9	2.0
113°	0.2	0.4	1.3	2.1	2.4	1.7	0.8	0.5	0.3	1.0	2.0
114°	0.2	0.5	1.2	2.2	2.5	1.9	0.7	0.5	0.4	1.0	1.9
115°	0.3	0.4	1.1	2.4	2.7	2.0	0.8	0.5	0.4	1.1	2.0
116°	0.3	0.4	1.1	2.3	2.7	2.0	0.8	0.5	0.4	1.0	2.0
117°	0.2	0.5	1.0	2.2	2.8	2.1	0.8	0.5	0.4	1.2	2.0
118°	0.2	0.5	1.0	2.1	2.9	2.2	0.7	0.5	0.5	1.1	2.0
119°	0.3	0.4	1.1	2.1	3.0	2.1	0.7	0.4	0.5	1.2	2.0
120°	0.3	0.5	1.0	2.1	2.2	2.2	0.7	0.5	0.5	1.2	2.0
121°	0.3	0.6	1.0	2.1	0.9	2.1	0.6	0.6	0.5	1.2	2.0
122°	0.4	0.6	0.9	2.3	0.3	2.1	0.7	0.6	0.5	1.2	1.9
123°	0.3	0.6	0.9	2.2	0.3	1.9	0.7	0.6	0.5	1.2	1.9
124°	0.3	0.6	0.9	2.2	0.3	1.9	0.6	0.6	0.6	1.1	1.9
125°	0.4	0.6	0.8	2.2	0.2	1.8	0.7	0.7	0.5	1.1	1.8
126°	0.3	0.6	0.8	2.1	0.3	1.7	0.7	0.7	0.5	1.1	1.9
127°	0.3	0.5	0.8	2.1	0.3	1.6	0.6	0.6	0.5	1.2	1.9
128°	0.2	0.6	0.8	2.0	0.3	1.6	0.7	0.7	0.6	1.1	1.8
129°	0.3	0.6	0.8	2.0	0.3	1.5	0.7	0.7	0.5	1.1	1.7
130°	0.3	0.6	0.8	1.9	0.3	1.7	0.7	0.6	0.6	0.9	1.7
131°	0.3	0.6	0.9	1.8	0.3	1.9	0.7	0.7	0.6	1.0	1.7
132°	0.3	0.6	0.8	1.7	0.2	1.2	0.7	0.8	0.6	0.9	1.8
133°	0.3	0.5	0.9	1.6	0.3	1.2	0.8	0.8	0.6	1.0	2.0
134°	0.3	0.6	0.9	1.7	0.3	1.2	0.7	0.8	0.6	0.9	2.2

TEST NUMBER: P1219807

CATALOG NUMBER: HLC6FS1E-24P-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
135°	0.3	0.6	0.9	1.5	0.3	1.3	0.7	0.8	0.5	0.9	1.9
136°	0.3	0.6	0.7	1.5	0.3	1.1	0.7	0.7	0.6	0.9	1.9
137°	0.3	0.6	0.9	1.4	0.4	1.2	0.7	0.7	0.7	0.8	2.3
138°	0.3	0.6	1.1	1.4	0.3	1.3	0.8	0.8	0.5	1.0	3.3
139°	0.3	0.5	1.2	1.4	0.3	1.3	0.8	0.7	0.5	0.9	2.5
140°	0.3	0.6	1.0	1.3	0.4	1.2	0.8	0.8	0.6	0.9	1.8
141°	0.3	0.6	1.0	1.3	0.3	1.2	0.8	0.7	0.6	1.0	2.0
142°	0.3	0.6	0.9	1.3	0.4	1.1	0.8	0.7	0.6	0.9	2.0
143°	0.3	0.6	0.9	1.3	0.4	1.0	0.6	0.7	0.6	0.9	1.6
144°	0.3	0.5	0.9	1.1	0.4	1.1	0.8	0.6	0.5	1.0	1.4
145°	0.3	0.6	0.9	1.1	0.4	1.1	0.8	0.7	0.6	0.9	1.4
146°	0.3	0.5	0.9	1.1	0.3	1.0	0.8	0.5	0.6	0.8	1.4
147°	0.3	0.6	0.8	1.0	0.4	1.0	0.8	0.7	0.7	0.8	1.7
148°	0.3	0.6	0.8	1.0	0.4	1.0	0.7	0.7	0.7	0.8	1.5
149°	0.3	0.6	0.9	1.0	0.4	0.9	0.8	0.6	0.7	0.8	1.4
150°	0.3	0.4	0.8	0.9	0.4	0.9	0.7	0.6	0.7	0.8	1.2
151°	0.2	0.6	1.0	1.0	0.4	0.9	0.8	0.6	0.6	0.8	1.1
152°	0.3	0.5	1.3	1.0	0.4	0.8	0.7	0.6	0.7	0.8	1.1
153°	0.2	0.5	0.8	1.0	0.4	0.8	0.6	0.5	0.7	0.8	1.1
154°	0.3	0.5	0.8	0.9	0.4	0.8	0.5	0.5	0.6	0.7	1.0
155°	0.2	0.6	0.7	1.1	0.4	0.8	0.4	0.4	0.7	0.7	0.9
156°	0.3	0.5	0.8	1.0	0.4	0.8	0.3	0.5	0.7	0.7	0.9
157°	0.2	0.5	0.7	0.9	0.4	0.6	0.3	0.5	0.7	0.7	0.9
158°	0.3	0.5	0.6	0.8	0.4	0.6	0.4	0.4	0.6	0.7	0.8
159°	0.2	0.5	0.6	0.7	0.4	0.4	0.3	0.4	0.6	0.7	0.8
160°	0.2	0.5	0.5	0.7	0.4	0.5	0.3	0.4	0.6	0.7	0.9
161°	0.2	0.5	0.5	0.8	0.5	0.5	0.4	0.4	0.6	0.7	0.8
162°	0.3	0.5	0.7	0.7	0.4	0.3	0.3	0.3	0.6	0.7	0.7
163°	0.3	0.5	0.6	0.7	0.4	0.3	0.5	0.3	0.6	0.7	0.7
164°	0.3	0.5	0.6	0.6	0.4	0.3	0.5	0.3	0.6	0.7	0.7
165°	0.2	0.6	0.6	0.5	0.3	0.3	0.4	0.3	0.5	0.6	0.7
166°	0.2	0.5	0.6	0.5	0.1	0.2	0.4	0.3	0.6	0.6	0.6
167°	0.2	0.5	0.5	0.5	0.3	0.3	0.4	0.3	0.5	0.7	0.6
168°	0.2	0.4	0.5	0.6	0.3	0.3	0.4	0.3	0.5	0.6	0.6
169°	0.3	0.5	0.5	0.6	0.2	0.3	0.3	0.3	0.5	0.5	0.6
170°	0.3	0.4	0.5	0.3	0.2	0.3	0.2	0.3	0.4	0.4	0.4
171°	0.2	0.3	0.5	0.4	0.2	0.3	0.3	0.3	0.4	0.3	0.3
172°	0.2	0.3	0.5	0.5	0.2	0.3	0.3	0.2	0.3	0.2	0.3
173°	0.1	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2
174°	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
176°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
177°	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2
178°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
179°	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2

TEST NUMBER: P1219807
CATALOG NUMBER: HLC6FS1E-24P-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
180°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

TEST NUMBER: P1219807

CATALOG NUMBER: HLC6FS1E-24P-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	356.4	356.4	356.4	356.4	356.4	356.4
1°	355.6	356.3	356.6	356.7	356.6	356.6
2°	354.9	356.1	356.5	356.9	356.7	356.8
3°	354.0	355.8	356.5	356.4	356.6	356.7
4°	352.9	355.4	356.2	356.6	356.5	356.5
5°	351.7	354.8	355.7	356.3	356.1	356.2
6°	350.4	353.9	355.2	355.8	355.7	355.7
7°	348.7	353.1	354.2	355.3	355.1	355.0
8°	347.1	352.0	353.3	354.6	354.3	354.4
9°	345.2	350.9	352.3	353.5	353.5	353.5
10°	343.4	349.6	351.1	352.5	352.3	352.4
11°	341.5	348.3	349.8	351.4	351.2	351.3
12°	339.2	346.8	348.3	350.2	349.9	350.0
13°	337.0	344.9	346.8	348.7	348.4	348.6
14°	334.8	343.1	345.1	347.1	346.8	347.1
15°	332.1	341.2	343.3	345.3	345.1	345.2
16°	329.4	339.2	341.4	343.6	343.5	343.4
17°	326.7	337.0	339.3	341.4	341.4	341.5
18°	323.5	334.7	337.1	339.4	339.2	339.3
19°	320.8	332.3	334.5	337.2	337.0	337.1
20°	317.6	329.4	332.1	335.0	334.7	334.8
21°	314.6	326.8	329.6	332.4	332.0	332.4
22°	311.2	324.0	326.8	329.9	329.6	329.6
23°	307.9	321.1	324.1	327.2	326.9	326.9
24°	304.4	317.8	321.2	324.1	324.1	324.2
25°	300.5	314.8	318.2	321.3	320.8	321.3
26°	296.9	311.6	314.8	318.3	317.9	318.1
27°	292.8	308.1	311.6	315.0	314.9	315.2
28°	289.0	304.6	308.4	311.7	311.4	311.6
29°	284.9	301.2	304.9	308.5	308.2	308.3
30°	280.9	297.6	301.1	305.2	304.7	304.8
31°	277.1	293.5	297.5	301.3	301.3	301.3
32°	272.5	289.8	293.9	297.8	297.7	297.9
33°	268.1	285.9	289.8	294.1	293.7	293.8
34°	263.6	281.9	286.0	290.3	289.9	290.0
35°	259.3	277.7	282.0	286.0	285.8	286.1
36°	254.6	273.6	278.0	282.0	281.8	282.3
37°	250.3	269.4	273.6	278.0	277.8	277.9
38°	245.7	264.8	269.4	274.0	273.7	273.8
39°	240.9	260.5	265.1	269.5	269.3	269.7
40°	236.0	256.1	260.5	265.3	265.0	265.0
41°	231.3	251.7	256.0	261.0	260.7	260.6
42°	226.2	246.6	251.6	256.6	256.4	256.2
43°	221.4	242.1	247.1	251.6	251.3	251.8
44°	216.4	237.5	242.0	247.1	246.9	247.0

TEST NUMBER: P1219807

CATALOG NUMBER: HLC6FS1E-24P-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	211.2	232.5	237.4	242.5	242.3	242.5
46°	205.9	227.7	232.8	237.5	237.3	237.9
47°	201.0	222.9	227.6	232.9	232.6	232.6
48°	195.9	218.1	222.8	228.1	227.9	227.9
49°	190.9	212.8	218.0	223.3	223.0	223.1
50°	185.6	207.9	213.1	218.0	217.8	218.3
51°	180.2	203.0	207.8	213.3	213.1	213.0
52°	175.1	198.1	202.9	207.8	208.1	208.1
53°	169.7	192.5	198.0	202.8	202.6	203.1
54°	164.8	187.5	193.0	197.9	197.7	198.1
55°	159.3	182.5	187.4	192.9	192.7	192.6
56°	154.3	177.0	182.4	187.5	187.6	187.6
57°	148.8	171.8	177.3	182.4	182.2	182.6
58°	143.2	166.7	171.6	177.4	177.2	177.0
59°	138.3	161.5	166.5	172.2	172.0	171.8
60°	133.0	156.5	161.4	166.5	166.9	166.8
61°	127.9	150.8	156.3	161.3	161.8	161.6
62°	122.6	145.7	150.7	156.2	156.1	156.4
63°	117.2	140.6	145.6	151.2	151.1	151.0
64°	111.7	135.0	140.4	145.5	146.0	145.8
65°	106.8	129.9	135.4	140.4	140.2	140.1
66°	102.1	125.0	129.8	135.4	135.2	135.0
67°	96.8	119.4	124.8	130.2	130.0	129.9
68°	91.7	114.3	119.8	124.8	125.2	124.9
69°	86.7	109.2	114.7	119.8	119.6	119.4
70°	82.1	104.4	109.0	114.6	114.5	114.2
71°	77.1	98.9	104.2	109.5	109.4	109.1
72°	72.7	94.2	99.3	104.1	104.0	104.2
73°	68.3	89.5	94.5	99.3	99.2	98.9
74°	63.8	84.3	89.4	94.4	94.3	94.0
75°	58.8	79.5	84.6	89.3	89.1	89.3
76°	54.9	75.0	79.9	84.6	84.4	84.1
77°	50.6	70.4	74.9	79.8	79.6	79.3
78°	46.8	66.1	70.3	74.8	75.1	74.8
79°	43.2	61.4	66.0	70.2	70.6	70.2
80°	39.6	57.2	61.8	65.8	65.8	65.9
81°	35.7	53.2	57.2	61.7	61.6	61.3
82°	32.5	49.2	53.0	57.1	57.4	57.1
83°	29.6	45.1	49.2	53.0	52.9	53.0
84°	26.6	41.4	45.3	49.1	49.0	49.1
85°	23.7	38.0	41.7	45.4	45.3	44.9
86°	21.1	34.7	38.0	41.7	41.6	41.3
87°	18.7	31.2	34.7	38.0	37.9	37.9
88°	16.6	28.2	31.5	34.6	34.5	34.6
89°	14.6	25.4	28.3	31.4	31.3	31.1

TEST NUMBER: P1219807

CATALOG NUMBER: HLC6FS1E-24P-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	12.7	22.8	25.5	28.5	28.4	28.1
91°	11.0	20.2	22.9	25.5	25.6	25.4
92°	9.4	17.9	20.2	22.9	22.7	22.8
93°	8.0	15.9	18.0	20.5	20.4	20.2
94°	6.9	13.9	15.9	18.2	18.0	10.8
95°	6.1	12.2	14.0	15.9	16.0	0.0
96°	5.3	10.4	12.2	14.0	13.9	0.0
97°	4.5	9.0	10.7	12.3	12.3	0.0
98°	3.8	7.8	9.2	10.7	10.7	0.0
99°	3.2	6.8	7.9	9.2	9.3	0.0
100°	2.6	5.9	6.7	7.9	7.9	0.0
101°	2.3	5.0	5.7	6.7	6.7	0.0
102°	2.1	4.3	4.8	5.7	5.7	0.0
103°	2.1	3.7	4.0	4.8	4.8	0.0
104°	2.2	3.3	3.4	3.9	3.9	0.0
105°	2.4	3.0	2.8	3.2	3.2	0.5
106°	2.7	2.6	2.3	2.6	2.5	0.2
107°	2.9	2.3	2.0	2.0	2.0	0.4
108°	2.8	2.1	1.7	1.5	1.5	0.4
109°	2.8	1.9	1.5	1.2	1.0	0.3
110°	2.8	1.9	1.3	0.9	0.7	0.2
111°	2.9	2.1	1.2	0.7	0.5	0.3
112°	2.9	2.3	1.3	0.6	0.4	0.2
113°	3.0	2.5	1.4	0.7	0.4	0.2
114°	3.1	2.5	1.5	0.7	0.4	0.2
115°	3.1	2.6	1.6	0.8	0.5	0.3
116°	3.1	2.6	1.7	0.9	0.5	0.3
117°	3.1	2.7	1.7	0.9	0.4	0.2
118°	3.0	2.7	1.7	0.9	0.5	0.2
119°	2.9	2.8	1.8	0.9	0.4	0.3
120°	3.0	2.7	1.9	1.0	0.6	0.3
121°	2.9	1.3	1.9	1.0	0.5	0.3
122°	2.8	0.2	1.9	1.0	0.4	0.4
123°	2.7	0.3	2.0	1.1	0.5	0.3
124°	2.7	0.2	2.1	1.1	0.5	0.3
125°	2.6	0.3	2.1	1.1	0.6	0.4
126°	2.6	0.3	2.1	1.2	0.5	0.3
127°	2.5	0.2	2.1	1.2	0.6	0.3
128°	2.6	0.3	2.1	1.3	0.6	0.2
129°	3.2	0.3	2.1	1.3	0.6	0.3
130°	3.6	0.2	2.2	1.3	0.6	0.3
131°	2.4	0.3	2.3	1.4	0.5	0.3
132°	2.2	0.3	2.6	1.4	0.6	0.3
133°	2.1	0.3	4.3	1.5	0.6	0.3
134°	2.1	0.3	3.5	1.5	0.6	0.3

TEST NUMBER: P1219807

CATALOG NUMBER: HLC6FS1E-24P-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
135°	2.0	0.3	2.4	1.5	0.6	0.3
136°	2.0	0.3	2.3	1.5	0.6	0.3
137°	2.0	0.3	2.3	1.5	0.7	0.3
138°	1.9	0.3	2.2	1.5	0.6	0.3
139°	1.9	0.3	2.2	1.5	0.6	0.3
140°	1.8	0.3	2.2	1.6	0.6	0.3
141°	1.9	0.3	2.3	1.6	0.6	0.3
142°	1.9	0.3	2.6	1.6	0.6	0.3
143°	2.0	0.4	2.4	1.6	0.7	0.3
144°	2.5	0.3	2.4	1.6	0.7	0.3
145°	3.4	0.4	2.8	1.6	0.5	0.3
146°	2.8	0.3	3.4	1.6	0.6	0.3
147°	2.0	0.3	3.2	1.5	0.6	0.3
148°	2.0	0.3	2.7	1.4	0.7	0.3
149°	1.8	0.2	2.2	1.1	0.6	0.3
150°	1.6	0.4	2.0	0.8	0.6	0.3
151°	1.5	0.4	2.0	0.8	0.7	0.2
152°	1.5	0.4	2.0	0.8	0.6	0.3
153°	1.4	0.4	1.9	0.9	0.7	0.2
154°	1.3	0.4	1.9	1.0	0.7	0.3
155°	1.3	0.4	1.8	1.1	0.7	0.2
156°	1.2	0.4	1.8	1.1	0.7	0.3
157°	1.2	0.4	1.6	1.0	0.7	0.2
158°	1.3	0.3	1.7	0.9	0.6	0.3
159°	1.5	0.4	1.6	0.8	0.5	0.2
160°	1.3	0.4	1.4	0.8	0.6	0.2
161°	1.0	0.4	0.9	0.7	0.6	0.2
162°	0.9	0.4	0.7	0.6	0.5	0.3
163°	0.9	0.3	0.5	0.7	0.6	0.3
164°	0.7	0.4	0.5	0.6	0.5	0.3
165°	0.5	0.4	0.4	0.6	0.5	0.2
166°	0.6	0.4	0.5	0.6	0.4	0.2
167°	0.5	0.4	0.4	0.5	0.3	0.2
168°	0.3	0.3	0.4	0.5	0.3	0.2
169°	0.3	0.4	0.3	0.4	0.2	0.3
170°	0.3	0.2	0.3	0.4	0.2	0.3
171°	0.3	0.3	0.3	0.3	0.2	0.2
172°	0.2	0.3	0.3	0.3	0.2	0.2
173°	0.2	0.2	0.3	0.2	0.2	0.1
174°	0.2	0.2	0.2	0.2	0.2	0.2
175°	0.2	0.2	0.2	0.2	0.2	0.2
176°	0.1	0.2	0.2	0.2	0.2	0.2
177°	0.2	0.2	0.2	0.2	0.2	0.2
178°	0.2	0.1	0.2	0.1	0.2	0.2
179°	0.2	0.2	0.1	0.1	0.2	0.2

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TEST NUMBER: P1219807
CATALOG NUMBER: HLC6FS1E-24P-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
180°	0.2	0.2	0.2	0.2	0.2	0.2

TEST NUMBER: P1219807

CATALOG NUMBER: HLC6FS1E-24P-4000K

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room Dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	22.4	24.0	22.7	24.3	24.7	22.1	23.7	22.4	24.0	24.4
	3H	24.4	25.9	24.8	26.3	26.7	24.0	25.5	24.4	25.8	26.2
	4H	25.3	26.7	25.8	27.1	27.5	24.8	26.2	25.2	26.6	27.0
	6H	26.2	27.5	26.6	27.9	28.3	25.5	26.8	26.0	27.2	27.6
	8H	26.5	27.8	27.0	28.2	28.7	25.8	27.1	26.3	27.5	27.9
	12H	26.9	28.1	27.4	28.6	29.0	26.1	27.3	26.6	27.8	28.2
4H	2H	23.1	24.4	23.5	24.8	25.3	22.7	24.1	23.1	24.5	24.9
	3H	25.4	26.6	25.8	27.0	27.4	24.9	26.1	25.4	26.5	27.0
	4H	26.5	27.5	26.9	28.0	28.5	25.9	27.0	26.4	27.5	27.9
	6H	27.5	28.4	27.9	28.9	29.4	26.9	27.8	27.3	28.3	28.8
	8H	27.9	28.8	28.4	29.3	29.8	27.3	28.1	27.7	28.6	29.1
	12H	28.4	29.2	29.0	29.8	30.3	27.7	28.5	28.2	29.0	29.5
8H	4H	26.9	27.8	27.4	28.3	28.8	26.4	27.2	26.8	27.7	28.2
	6H	28.1	28.9	28.6	29.4	29.9	27.5	28.2	28.0	28.8	29.3
	8H	28.7	29.4	29.3	30.0	30.5	28.1	28.7	28.6	29.3	29.8
	12H	29.4	30.0	30.0	30.5	31.1	28.7	29.3	29.2	29.8	30.4
12H	4H	27.0	27.8	27.5	28.3	28.8	26.4	27.2	26.9	27.7	28.3
	6H	28.3	29.0	28.8	29.5	30.0	27.6	28.3	28.2	28.8	29.4
	8H	29.0	29.6	29.5	30.1	30.7	28.3	28.9	28.8	29.4	30.0

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