

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: P130127

Luminaire Tested: **HL618TAT - HLM6927 - HL6WFL - 71PS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P130127  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33492)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: HL618TAT - HLM6927 - HL6WFL - 71PS  
Description: HALO ALLSLOPE 6" 30W, Drop Opal Glass Lens, White Polymer Trim Ring  
"Dead Front", Wet Location - Showerlight using 55 Degree Optic at a 6-12  
Pitch  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

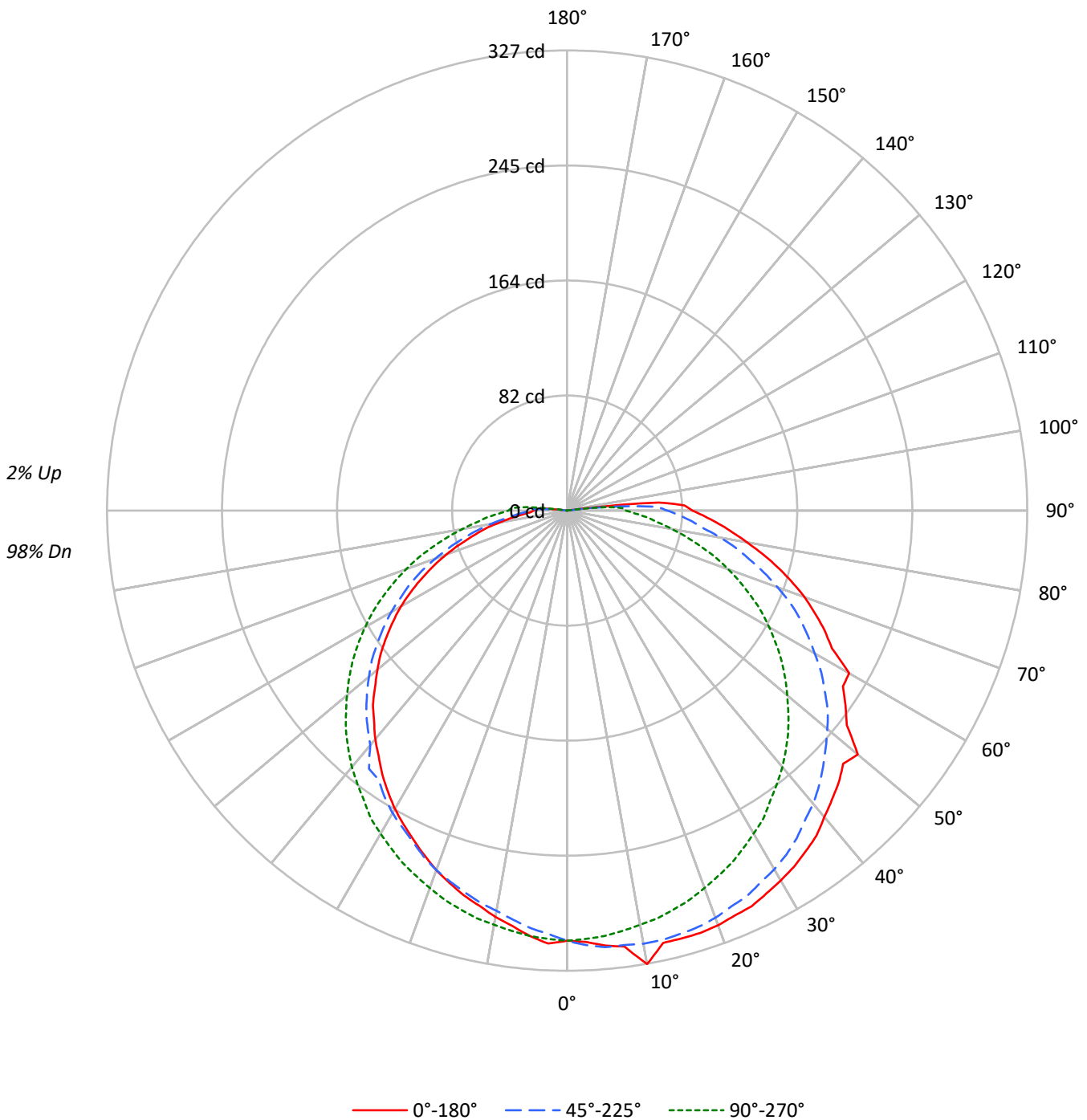
Lumens per Lamp: N/A  
Luminaire Lumens: 1116.0 lumens  
Efficiency: N/A  
Efficacy: 40.4 lumens/watt  
Spacing Criteria (0/90/45): 1.33 / 1.29 / 1.46  
Luminous Opening: Vertical Cylinder (Dia: 0.48' x H: 0.1')  
CIE Type: Direct  
  
Input Watts (W): 27.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	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	118	118	118	118	115	115	115	115	110	110	110	105	105	105	100	100	100	98
1	106	100	95	90	103	97	92	88	92	89	85	88	85	82	84	81	79	77
2	95	86	78	71	92	83	76	70	79	73	68	76	71	66	72	68	64	62
3	86	74	65	58	83	72	64	57	69	62	56	66	60	55	63	58	53	51
4	78	65	56	48	76	64	55	48	61	53	47	58	51	46	56	50	45	43
5	72	58	48	41	69	57	48	41	54	46	40	52	45	39	50	44	39	36
6	66	52	42	36	64	51	42	35	49	41	35	47	40	34	45	39	34	31
7	61	47	38	31	59	46	37	31	44	36	31	42	35	30	41	35	30	28
8	57	43	34	28	55	42	33	27	40	33	27	39	32	27	37	31	26	24
9	53	39	31	25	52	38	30	25	37	30	24	36	29	24	35	28	24	22
10	50	36	28	22	48	35	27	22	34	27	22	33	26	22	32	26	22	20

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	18247	18247	18247
5°	18165	17772	17772
10°	18944	17306	16982
15°	18155	16920	16338
20°	18164	16530	15748
25°	18178	16197	15136
30°	18136	15842	14629
35°	18161	15458	14069
40°	18114	15164	13514
45°	18207	14819	13019
50°	19014	14402	12413
55°	18211	14039	11829
60°	18910	13555	11160
65°	18165	12992	10248
70°	18097	12287	9220
75°	17902	11360	7967
80°	17784	10366	6650
85°	18372	9754	5361



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.0	2.6
10°-20°	83.8	7.5
20°-30°	129.8	11.6
30°-40°	162.3	14.5
40°-50°	177.4	15.9
50°-60°	173.8	15.6
60°-70°	151.1	13.5
70°-80°	112.2	10.1
80°-90°	70.2	6.3
90°-100°	26.4	2.4
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	242.6	21.7
0°-40°	404.9	36.3
0°-60°	756.1	67.8
0°-90°	1089.6	97.6
90°-120°	26.4	2.4
90°-150°	26.4	2.4
90°-180°	26.0	2.3
0°-180°	1116.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	306	306	306	306	306	
5°	310	311	304	298	304	30
15°	315	311	293	281	283	89
25°	310	302	276	260	258	143
35°	296	284	252	234	229	185
45°	273	257	222	202	195	212
55°	241	223	186	165	157	218
65°	202	183	144	123	114	201
75°	155	134	98	77	69	163
85°	108	89	58	37	32	93
90°	89	71	42	27	24	49
95°	65	32	28	10	16	29
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	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°
0°	305.7	305.7	305.7	305.7	305.7	305.7	305.7	305.7	305.7
2.5°	306.8	309.1	309.1	308.0	304.6	305.7	301.2	302.3	308.0
5°	310.2	311.4	311.4	308.0	303.5	303.5	297.8	297.8	303.5
7.5°	312.5	313.6	311.4	308.0	301.2	300.1	293.3	293.3	297.8
10°	327.2	314.7	312.5	306.8	298.9	296.7	288.8	289.9	293.3
12.5°	314.7	314.7	312.5	305.7	296.7	293.3	285.4	284.3	287.7
15°	314.7	314.7	311.4	303.5	293.3	289.9	280.9	279.8	283.2
17.5°	314.7	314.7	310.2	301.2	289.9	285.4	276.4	275.3	277.5
20°	313.6	313.6	308.0	297.8	285.4	280.9	271.9	269.6	271.9
22.5°	311.4	311.4	304.6	294.4	280.9	275.3	266.2	264.0	265.1
25°	310.2	309.1	302.3	289.9	276.4	270.7	259.5	258.3	258.3
27.5°	306.8	305.7	297.8	286.5	270.7	264.0	253.8	251.6	251.6
30°	303.5	302.3	294.4	280.9	265.1	258.3	248.2	244.8	244.8
32.5°	300.1	298.9	289.9	276.4	259.5	251.6	241.4	238.0	236.9
35°	295.6	294.4	284.3	269.6	251.6	243.7	233.5	231.3	229.0
37.5°	291.1	288.8	277.5	262.9	244.8	236.9	231.3	223.4	220.0
40°	284.3	283.2	271.9	256.1	238.0	232.4	217.7	216.6	212.1
42.5°	278.6	276.4	265.1	249.3	230.1	220.0	209.8	206.4	203.1
45°	273.0	269.6	257.2	241.4	222.2	212.1	201.9	197.4	195.2
47.5°	266.2	267.4	249.3	233.5	213.2	203.1	192.9	188.4	185.0
50°	269.6	256.1	241.4	224.5	204.2	194.0	183.9	179.4	176.0
52.5°	250.4	247.1	233.5	215.5	195.2	185.0	174.9	170.3	167.0
55°	241.4	238.0	223.4	206.4	186.1	174.9	164.7	160.2	156.8
57.5°	232.4	229.0	214.3	197.4	176.0	164.7	154.6	150.0	146.7
60°	231.3	218.9	203.1	187.3	165.8	154.6	144.4	143.3	136.5
62.5°	212.1	208.7	192.9	176.0	155.7	143.3	133.1	128.6	125.2
65°	201.9	198.5	182.8	164.7	144.4	132.0	123.0	117.3	113.9
67.5°	190.7	187.3	171.5	153.4	133.1	120.7	111.7	107.2	102.7
70°	179.4	176.0	159.1	142.1	121.8	109.4	99.3	94.8	91.4
72.5°	167.0	163.6	146.7	129.7	110.6	97.0	88.0	83.5	80.1
75°	154.6	151.2	134.2	118.5	98.1	85.7	76.7	72.2	68.8
77.5°	142.1	138.8	123.0	106.0	86.9	74.5	65.4	60.9	59.8
80°	129.7	126.3	110.6	93.6	75.6	63.2	55.3	50.8	48.5
82.5°	118.5	115.1	98.1	83.5	65.4	53.0	45.1	41.7	39.5
85°	108.3	103.8	89.1	73.3	57.5	44.0	37.2	32.7	31.6
87.5°	98.1	93.6	80.1	64.3	48.5	37.2	30.5	27.1	25.9
90°	89.1	84.6	71.1	56.4	41.7	32.7	27.1	24.8	23.7
92.5°	83.5	77.8	63.2	48.5	39.5	30.5	22.6	21.4	22.6
95°	65.4	48.5	31.6	30.5	28.2	16.9	10.2	12.4	15.8
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)