

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: P130129

Luminaire Tested: **HL618TAT - HLM6935 - HL6WFL - 71PS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P130129  
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 - HLM6935 - 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 / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

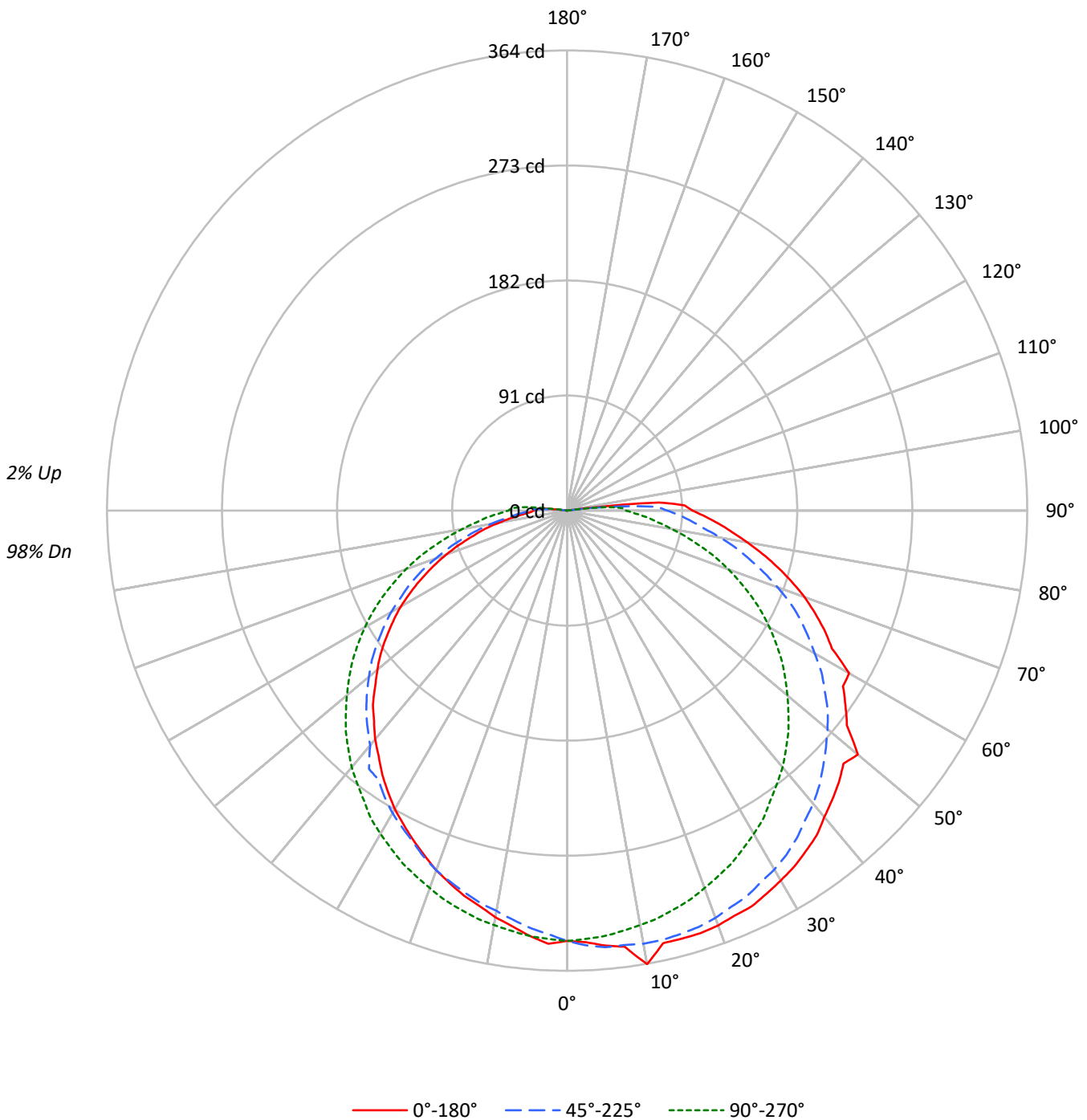
Lumens per Lamp: N/A  
Luminaire Lumens: 1242.6 lumens  
Efficiency: N/A  
Efficacy: 45.0 lumens/watt  
Spacing Criteria (0/90/45): 1.33 / 1.29 / 1.46  
Luminous Opening: Vertical Cylinder (Dia: 0.48' x H: 0.1')  
CIE Type: Direct  
  
Input Watts (W): 27.6  
Input Voltage (V): NR  
Input Current (Ain): 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



TEST NUMBER: P130129

CATALOG NUMBER: HL618TAT - HLM6935 - HL6WFL - 71PS

### Luminous Intensity Polar Plot





TEST NUMBER: P130129

CATALOG NUMBER: HL618TAT - HLM6935 - HL6WFL - 71PS

**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°	20319	20319	20319
5°	20226	19787	19787
10°	21093	19274	18910
15°	20220	18841	18189
20°	20226	18407	17532
25°	20241	18037	16859
30°	20192	17640	16290
35°	20219	17209	15667
40°	20166	16884	15049
45°	20275	16507	14493
50°	21173	16038	13823
55°	20278	15639	13172
60°	21052	15100	12427
65°	20226	14467	11417
70°	20145	13689	10259
75°	19928	12656	8870
80°	19813	11545	7404
85°	20459	10874	5971



TEST NUMBER: P130129

CATALOG NUMBER: HL618TAT - HLM6935 - HL6WFL - 71PS

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.3	2.6
10°-20°	93.4	7.5
20°-30°	144.5	11.6
30°-40°	180.7	14.5
40°-50°	197.5	15.9
50°-60°	193.6	15.6
60°-70°	168.2	13.5
70°-80°	124.9	10.1
80°-90°	78.2	6.3
90°-100°	29.4	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°	270.2	21.7
0°-40°	450.8	36.3
0°-60°	841.9	67.8
0°-90°	1213.2	97.6
90°-120°	29.4	2.4
90°-150°	29.4	2.4
90°-180°	29.0	2.3
0°-180°	1242.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	340	340	340	340	340	
5°	345	347	338	332	338	33
15°	350	347	327	313	315	100
25°	345	337	308	289	288	159
35°	329	316	280	260	255	206
45°	304	286	248	225	217	236
55°	269	249	207	183	175	243
65°	225	204	161	137	127	223
75°	172	150	109	85	77	182
85°	121	99	64	42	35	103
90°	99	79	46	30	26	55
95°	73	35	31	11	18	33
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



TEST NUMBER: P130129

CATALOG NUMBER: HL618TAT - HLM6935 - HL6WFL - 71PS

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	340.4	340.4	340.4	340.4	340.4	340.4	340.4	340.4	340.4
2.5°	341.7	344.2	344.2	342.9	339.2	340.4	335.4	336.6	342.9
5°	345.4	346.7	346.7	342.9	337.9	337.9	331.6	331.6	337.9
7.5°	347.9	349.2	346.7	342.9	335.4	334.1	326.6	326.6	331.6
10°	364.3	350.5	347.9	341.7	332.9	330.4	321.6	322.8	326.6
12.5°	350.5	350.5	347.9	340.4	330.4	326.6	317.8	316.5	320.3
15°	350.5	350.5	346.7	337.9	326.6	322.8	312.8	311.5	315.3
17.5°	350.5	350.5	345.4	335.4	322.8	317.8	307.8	306.5	309.0
20°	349.2	349.2	342.9	331.6	317.8	312.8	302.7	300.2	302.7
22.5°	346.7	346.7	339.2	327.8	312.8	306.5	296.4	293.9	295.2
25°	345.4	344.2	336.6	322.8	307.8	301.5	288.9	287.7	287.7
27.5°	341.7	340.4	331.6	319.1	301.5	293.9	282.6	280.1	280.1
30°	337.9	336.6	327.8	312.8	295.2	287.7	276.3	272.6	272.6
32.5°	334.1	332.9	322.8	307.8	288.9	280.1	268.8	265.0	263.8
35°	329.1	327.8	316.5	300.2	280.1	271.3	260.0	257.5	255.0
37.5°	324.1	321.6	309.0	292.7	272.6	263.8	257.5	248.7	244.9
40°	316.5	315.3	302.7	285.1	265.0	258.8	242.4	241.2	236.2
42.5°	310.3	307.8	295.2	277.6	256.2	244.9	233.6	229.9	226.1
45°	304.0	300.2	286.4	268.8	247.5	236.2	224.8	219.8	217.3
47.5°	296.4	297.7	277.6	260.0	237.4	226.1	214.8	209.8	206.0
50°	300.2	285.1	268.8	250.0	227.4	216.1	204.7	199.7	196.0
52.5°	278.9	275.1	260.0	239.9	217.3	206.0	194.7	189.7	185.9
55°	268.8	265.0	248.7	229.9	207.3	194.7	183.4	178.4	174.6
57.5°	258.8	255.0	238.7	219.8	196.0	183.4	172.1	167.1	163.3
60°	257.5	243.7	226.1	208.5	184.7	172.1	160.8	159.5	152.0
62.5°	236.2	232.4	214.8	196.0	173.3	159.5	148.2	143.2	139.4
65°	224.8	221.1	203.5	183.4	160.8	147.0	136.9	130.6	126.9
67.5°	212.3	208.5	190.9	170.8	148.2	134.4	124.4	119.3	114.3
70°	199.7	196.0	177.1	158.3	135.7	121.8	110.5	105.5	101.7
72.5°	185.9	182.1	163.3	144.5	123.1	108.0	98.0	93.0	89.2
75°	172.1	168.3	149.5	131.9	109.3	95.5	85.4	80.4	76.6
77.5°	158.3	154.5	136.9	118.1	96.7	82.9	72.9	67.8	66.6
80°	144.5	140.7	123.1	104.3	84.2	70.3	61.6	56.5	54.0
82.5°	131.9	128.1	109.3	93.0	72.9	59.0	50.2	46.5	44.0
85°	120.6	115.6	99.2	81.6	64.1	49.0	41.5	36.4	35.2
87.5°	109.3	104.3	89.2	71.6	54.0	41.5	33.9	30.1	28.9
90°	99.2	94.2	79.1	62.8	46.5	36.4	30.1	27.6	26.4
92.5°	93.0	86.7	70.3	54.0	44.0	33.9	25.1	23.9	25.1
95°	72.9	54.0	35.2	33.9	31.4	18.8	11.3	13.8	17.6
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



TEST NUMBER: P130129

CATALOG NUMBER: HL618TAT - HLM6935 - HL6WFL - 71PS

**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)