

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: P130136

Luminaire Tested: **HL618TAT - HLM6930 - HL6WFL - ERT702**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P130136  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33494)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: HL618TAT - HLM6930 - HL6WFL - ERT702  
Description: HALO ALLSLOPE 6" 30W, Drop Opal Plastic 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 / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1635.5 lumens  
Efficiency: N/A  
Efficacy: 59.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.89 / 1.13  
Luminous Opening: Vertical Cylinder (Dia: 0.48' x H: 0.1')  
CIE Type: Direct

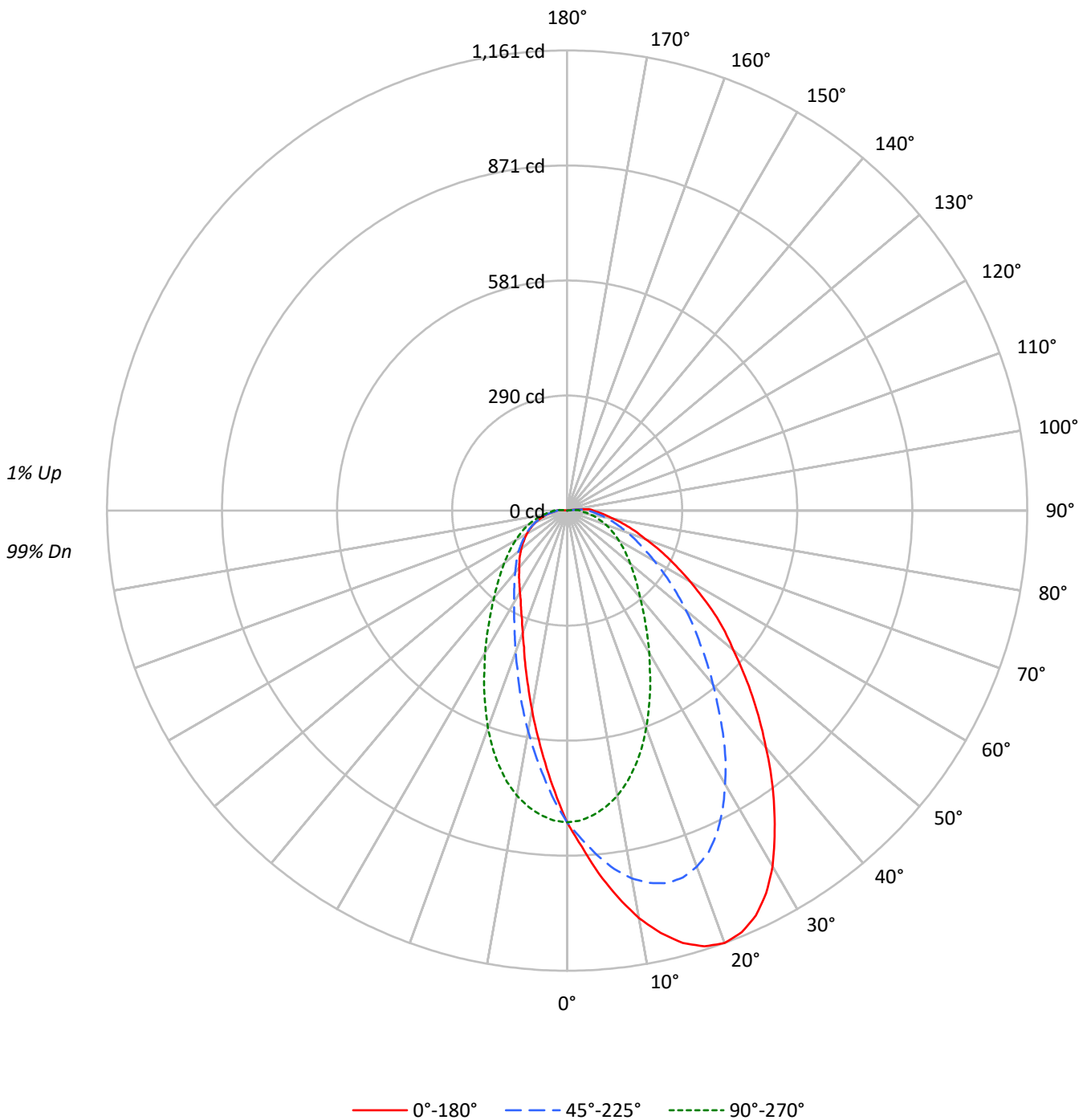
Input Watts (W): 27.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	119	119	119	119	116	116	116	116	110	110	110	105	105	105	101	101	101	99
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	91	85	79	96	89	83	78	85	80	76	82	78	74	79	75	72	70
3	91	81	73	67	89	79	72	66	76	70	65	73	68	64	71	66	62	60
4	84	72	64	58	82	71	63	57	68	62	56	66	60	55	64	59	54	52
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	51	45	70	58	50	44	57	49	44	55	48	44	53	47	43	41
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	37
8	63	50	42	36	61	49	41	36	48	41	36	46	40	35	45	39	35	33
9	59	46	38	33	58	45	38	33	44	37	33	43	37	32	42	36	32	30
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28

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

	0°	90°	180°
0°	46941	46941	46941
5°	53838	45118	37395
10°	60446	42278	29552
15°	65160	38392	23456
20°	67257	33808	18951
25°	66043	29048	16098
30°	61950	24734	14228
35°	55964	21079	12976
40°	49710	18280	11978
45°	44058	16207	11318
50°	38579	14642	10678
55°	34265	13360	10041
60°	29350	12280	9582
65°	25048	11318	9006
70°	21184	10471	8373
75°	18666	9472	7492
80°	16070	8378	6527
85°	14911	7244	5598



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.3	4.5
10°-20°	201.3	12.3
20°-30°	276.1	16.9
30°-40°	285.2	17.4
40°-50°	254.4	15.6
50°-60°	208.2	12.7
60°-70°	154.8	9.5
70°-80°	103.3	6.3
80°-90°	58.6	3.6
90°-100°	20.4	1.2
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°	550.7	33.7
0°-40°	835.9	51.1
0°-60°	1298.4	79.4
0°-90°	1615.1	98.8
90°-120°	20.4	1.2
90°-150°	20.4	1.2
90°-180°	20.0	1.2
0°-180°	1635.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	786	786	786	786	786	
5°	919	873	770	674	639	91
15°	1130	973	666	465	407	319
25°	1127	896	496	315	275	515
35°	911	685	343	232	211	569
45°	661	474	243	181	170	510
55°	454	318	177	139	133	405
65°	278	203	126	103	100	278
75°	161	127	82	66	65	171
85°	88	71	43	33	33	78
90°	66	54	33	26	26	37
95°	39	30	17	12	13	19
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°	786.4	786.4	786.4	786.4	786.4	786.4	786.4	786.4	786.4
2.5°	848.6	835.2	829.1	808.3	782.7	763.2	732.6	722.9	710.6
5°	919.4	898.7	873.0	826.6	770.5	725.3	674.0	654.5	638.6
7.5°	984.2	958.5	912.1	836.4	753.4	683.8	619.1	588.5	571.4
10°	1044.0	1009.8	942.6	838.9	730.2	639.8	565.3	529.9	510.4
12.5°	1091.6	1051.3	962.2	832.8	700.9	592.2	514.1	471.3	454.2
15°	1129.5	1081.8	973.2	818.1	665.5	548.2	465.2	422.5	406.6
17.5°	1152.7	1098.9	970.7	792.5	626.4	500.6	417.6	378.5	361.4
20°	1161.2	1101.4	956.1	760.7	583.7	459.1	379.7	344.3	327.2
22.5°	1151.4	1088.0	932.9	724.1	538.5	417.6	344.3	312.6	297.9
25°	1127.0	1062.3	896.2	680.1	495.7	381.0	315.0	286.9	274.7
27.5°	1088.0	1022.0	849.8	633.7	451.8	348.0	289.4	265.0	254.0
30°	1036.7	970.7	797.3	583.7	413.9	318.7	266.2	246.7	238.1
32.5°	974.4	910.9	743.6	534.8	377.3	294.3	249.1	230.8	223.5
35°	910.9	848.6	685.0	486.0	343.1	271.1	232.0	217.3	211.2
37.5°	846.2	788.8	625.2	442.0	313.8	250.3	217.3	205.1	199.0
40°	780.2	726.5	572.7	400.5	286.9	232.0	203.9	194.1	188.0
42.5°	719.2	665.5	522.6	363.9	263.7	216.1	191.7	183.2	178.3
45°	660.6	610.5	473.8	330.9	243.0	201.5	180.7	173.4	169.7
47.5°	602.0	556.8	432.3	301.6	224.7	188.0	169.7	163.6	160.0
50°	547.0	506.7	390.7	273.5	207.6	175.8	160.0	153.9	151.4
52.5°	501.8	460.3	352.9	249.1	191.7	163.6	149.0	145.3	142.9
55°	454.2	412.7	317.5	227.1	177.1	152.6	139.2	135.5	133.1
57.5°	402.9	370.0	284.5	206.4	163.6	141.6	129.4	127.0	125.8
60°	359.0	329.7	254.0	189.3	150.2	130.7	120.9	118.4	117.2
62.5°	316.3	291.8	227.1	170.9	138.0	120.9	111.1	108.7	108.7
65°	278.4	256.4	202.7	155.1	125.8	111.1	102.6	101.3	100.1
67.5°	245.4	224.7	181.9	140.4	114.8	98.9	92.8	92.8	91.6
70°	210.0	197.8	161.2	127.0	103.8	90.4	84.3	83.0	83.0
72.5°	185.6	173.4	142.9	113.6	92.8	80.6	75.7	75.7	74.5
75°	161.2	151.4	127.0	101.3	81.8	72.0	65.9	65.9	64.7
77.5°	139.2	131.9	111.1	89.1	72.0	62.3	57.4	57.4	56.2
80°	117.2	114.8	96.5	76.9	61.1	52.5	50.1	48.8	47.6
82.5°	102.6	98.9	84.3	65.9	51.3	44.0	40.3	40.3	40.3
85°	87.9	84.3	70.8	56.2	42.7	36.6	33.0	33.0	33.0
87.5°	75.7	73.3	61.1	47.6	36.6	30.5	28.1	28.1	28.1
90°	65.9	63.5	53.7	41.5	33.0	26.9	25.6	25.6	25.6
92.5°	59.8	56.2	47.6	34.2	28.1	24.4	22.0	20.8	23.2
95°	39.1	34.2	30.5	19.5	17.1	13.4	12.2	11.0	13.4
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)