

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: P130105

Luminaire Tested: **HL618TAT - HLM6935 - HL6WFL - 455H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P130105
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33485)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: HL618TAT - HLM6935 - HL6WFL - 455H
Description: HALO ALLSLOPE 6" 30W, Semi-Specular Haze Reflector, White Metal Trim Ring 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: 2230.2 lumens
Efficiency: N/A
Efficacy: 80.8 lumens/watt
Spacing Criteria (0/90/45): 1.45 / 0.76 / 1.17
Luminous Opening: Vertical Cylinder (Dia: 0.48' x H: 0.1')
CIE Type: Direct

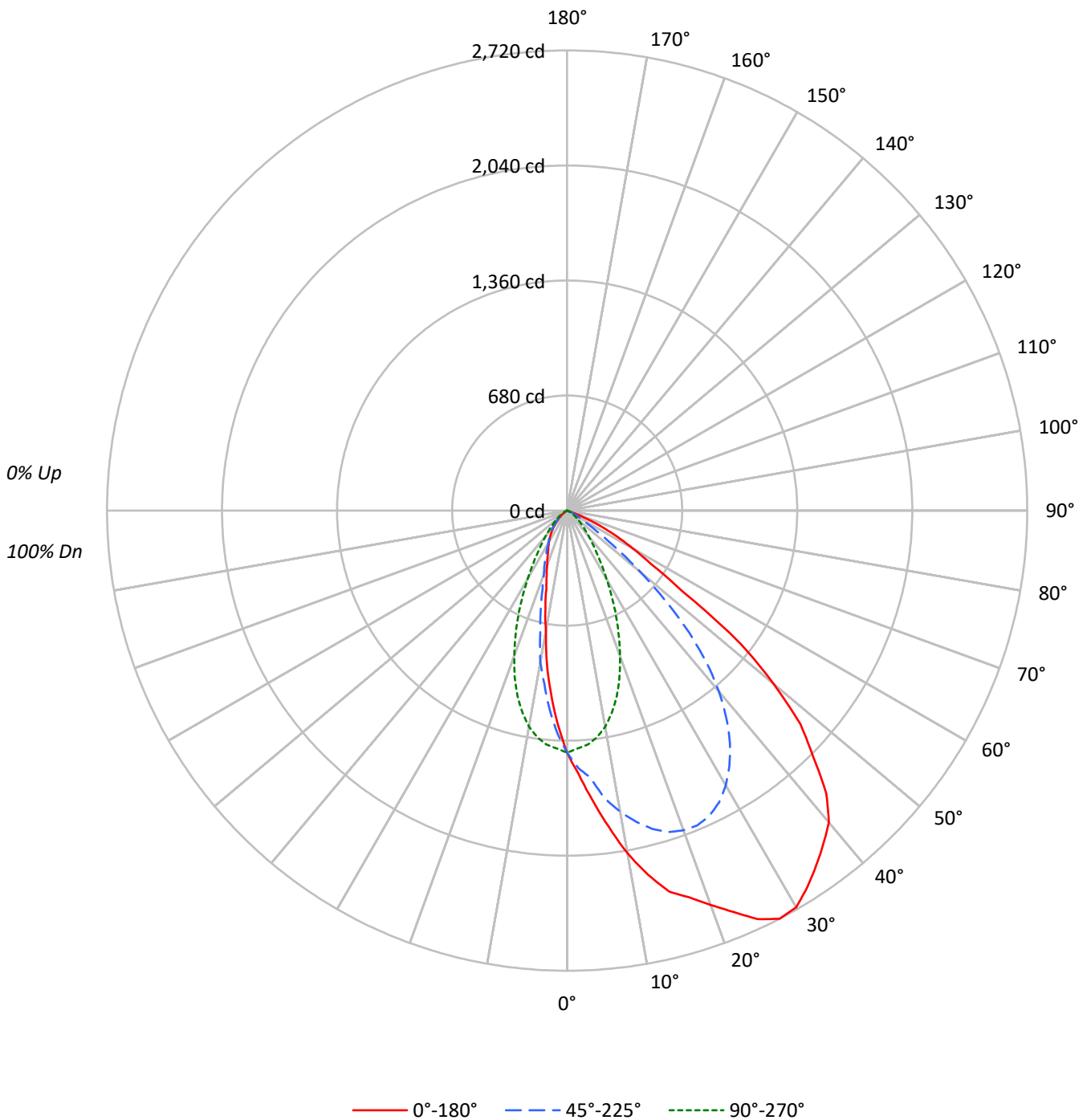
Input Watts (W): 27.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81					81			
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73					73			
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65					65			
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59					59			
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53					53			
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48					48			
8	70	59	51	46	69	58	51	46	57	50	46	56	50	46	54	49	46	44					44			
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	46	42	40					40			
10	62	50	44	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37					37			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	85388	85388	85388
5°	100625	81348	63681
10°	119150	75048	41977
15°	134536	65385	27396
20°	143647	52887	20063
25°	156158	39995	15594
30°	161775	27763	12818
35°	157588	18677	10150
40°	153342	12788	7671
45°	137175	8724	5282
50°	112217	5826	3153
55°	62916	3893	1645
60°	36765	2346	752
65°	20334	1134	306
70°	4630	464	0
75°	394	266	0
80°	0	315	0
85°	0	390	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.6	5.9
10°-20°	359.3	16.1
20°-30°	509.1	22.8
30°-40°	554.0	24.8
40°-50°	441.1	19.8
50°-60°	186.2	8.4
60°-70°	43.4	1.9
70°-80°	3.3	0.1
80°-90°	1.2	0.1
90°-100°	0.0	0.0
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°	1001.0	44.9
0°-40°	1555.0	69.7
0°-60°	2182.4	97.9
0°-90°	2230.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2230.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1430	1430	1430	1430	1430	
5°	1718	1585	1389	1183	1088	174
15°	2332	1948	1133	599	475	658
25°	2665	1990	682	296	266	1224
35°	2565	1678	304	176	165	1606
45°	2057	1019	131	92	79	1578
55°	834	214	52	31	22	827
65°	226	36	13	6	3	226
75°	3	2	2	1	0	10
85°	0	1	2	1	0	0
90°	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°	1430.5	1430.5	1430.5	1430.5	1430.5	1430.5	1430.5	1430.5	1430.5
2.5°	1558.9	1570.4	1523.4	1476.3	1407.5	1380.0	1319.2	1295.1	1264.1
5°	1718.4	1713.8	1585.3	1518.8	1389.2	1297.4	1182.7	1129.9	1087.5
7.5°	1885.9	1870.9	1718.4	1545.2	1351.3	1195.3	1033.6	954.4	915.4
10°	2057.9	2018.9	1806.7	1558.9	1296.2	1073.7	909.7	793.8	725.0
12.5°	2203.6	2157.7	1883.6	1558.9	1221.7	947.5	736.4	629.8	595.4
15°	2332.1	2273.6	1947.8	1537.1	1133.4	820.2	598.8	501.3	474.9
17.5°	2396.3	2367.7	1992.5	1502.7	1030.1	690.6	484.1	421.0	402.6
20°	2480.1	2413.5	2010.9	1448.8	913.1	565.5	400.3	362.5	346.4
22.5°	2567.3	2450.2	2013.2	1378.8	796.1	462.3	352.2	315.5	304.0
25°	2664.8	2477.8	1990.2	1291.7	682.5	378.5	296.0	275.3	266.1
27.5°	2719.8	2493.8	1944.4	1189.6	569.0	321.2	257.0	250.1	238.6
30°	2707.2	2490.4	1875.5	1068.0	464.6	270.7	223.7	219.1	214.5
32.5°	2640.7	2474.3	1786.1	941.8	375.1	231.7	198.5	193.9	189.3
35°	2565.0	2434.2	1678.2	805.3	304.0	198.5	175.5	169.8	165.2
37.5°	2487.0	2339.0	1546.3	674.5	246.6	169.8	152.6	145.7	141.1
40°	2406.7	2202.5	1396.0	550.6	200.7	148.0	131.9	125.0	120.4
42.5°	2267.9	2027.0	1220.5	419.8	161.7	126.2	111.3	106.7	99.8
45°	2056.8	1792.9	1018.6	300.5	130.8	105.5	91.8	82.6	79.2
47.5°	1870.9	1599.1	786.9	204.2	104.4	86.0	72.3	65.4	60.8
50°	1591.1	1315.7	563.2	138.8	82.6	67.7	56.2	49.3	44.7
52.5°	1293.9	957.8	365.9	92.9	66.5	53.9	42.4	35.6	32.1
55°	834.0	642.4	214.5	70.0	51.6	41.3	31.0	22.9	21.8
57.5°	587.3	442.8	131.9	53.9	40.1	29.8	21.8	16.1	13.8
60°	449.7	315.5	86.0	41.3	28.7	20.6	13.8	10.3	9.2
62.5°	332.7	214.5	57.4	29.8	19.5	13.8	9.2	6.9	5.7
65°	226.0	120.4	35.6	19.5	12.6	8.0	5.7	3.4	3.4
67.5°	114.7	57.4	20.6	12.6	8.0	4.6	3.4	2.3	1.1
70°	45.9	20.6	10.3	6.9	4.6	3.4	2.3	1.1	0.0
72.5°	11.5	8.0	5.7	3.4	3.4	2.3	1.1	1.1	0.0
75°	3.4	3.4	2.3	2.3	2.3	2.3	1.1	1.1	0.0
77.5°	1.1	1.1	1.1	2.3	2.3	2.3	1.1	1.1	0.0
80°	0.0	1.1	1.1	2.3	2.3	2.3	1.1	0.0	0.0
82.5°	0.0	1.1	1.1	2.3	2.3	2.3	1.1	0.0	0.0
85°	0.0	1.1	1.1	2.3	2.3	2.3	1.1	0.0	0.0
87.5°	0.0	1.1	1.1	2.3	2.3	2.3	1.1	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)