

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: P130116

Luminaire Tested: **HL618TAT - HLM6930 - HL6WFL - 456W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P130116
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33489)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: HL618TAT - HLM6930 - HL6WFL - 456W
Description: HALO ALLSLOPE 6" 30W, White Coilex Baffle, White Metal Trim Ring 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: 2142.3 lumens
Efficiency: N/A
Efficacy: 77.6 lumens/watt
Spacing Criteria (0/90/45): 1.45 / 0.79 / 1.17
Luminous Opening: Vertical Cylinder (Dia: 0.48' x H: 0.1')
CIE Type: Direct

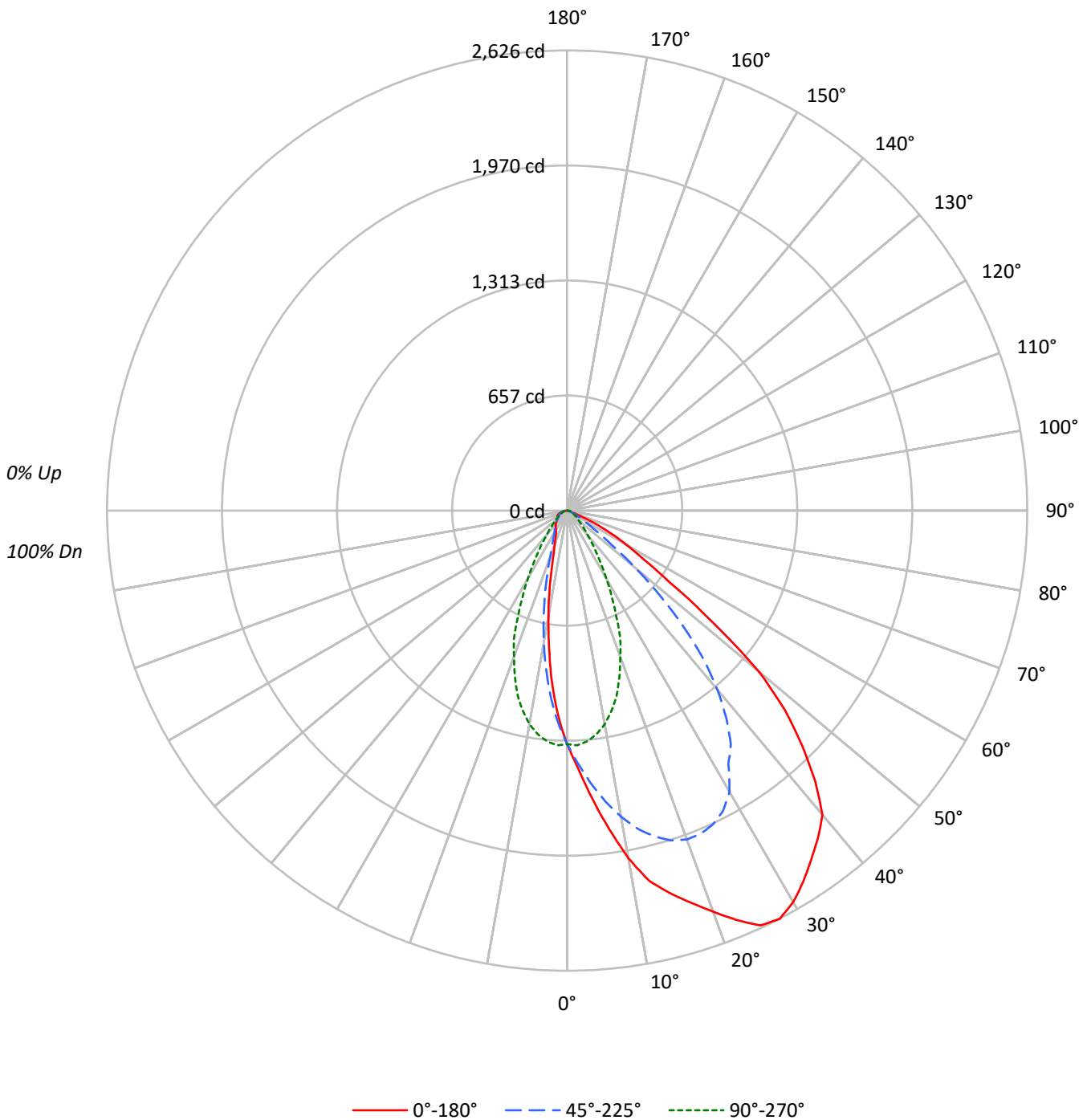
Input Watts (W): 27.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	71
4	91	81	74	69	89	80	73	68	78	72	67	75	70	67	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	54	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	61	50	43	38	60	49	43	38	48	42	38	47	42	38	47	41	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	79550	79550	79550
5°	96684	77384	57960
10°	116614	71598	35573
15°	130308	62962	19464
20°	141052	51375	12099
25°	153052	38752	8837
30°	154204	26700	7613
35°	149208	17504	6998
40°	144415	11532	6480
45°	126431	8123	5662
50°	100693	6065	5120
55°	53932	4888	4632
60°	31966	3834	5118
65°	15979	3113	5029
70°	3268	2814	4620
75°	1297	2582	4007
80°	1070	2139	3058
85°	763	1323	1713



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.3	5.8
10°-20°	337.1	15.7
20°-30°	478.8	22.4
30°-40°	518.7	24.2
40°-50°	408.2	19.1
50°-60°	179.9	8.4
60°-70°	62.7	2.9
70°-80°	24.2	1.1
80°-90°	8.3	0.4
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°	940.2	43.9
0°-40°	1458.9	68.1
0°-60°	2047.0	95.6
0°-90°	2142.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2142.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1333	1333	1333	1333	1333	
5°	1651	1563	1322	1070	990	169
15°	2259	1925	1091	487	337	643
25°	2612	1974	661	192	151	1191
35°	2429	1629	285	124	114	1522
45°	1896	945	122	87	85	1448
55°	715	199	65	60	61	705
65°	178	46	35	48	56	187
75°	11	13	22	31	35	15
85°	4	6	8	10	10	4
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°	1332.7	1332.7	1332.7	1332.7	1332.7	1332.7	1332.7	1332.7	1332.7
2.5°	1474.6	1463.4	1445.5	1388.6	1340.5	1273.5	1208.7	1199.8	1173.0
5°	1651.1	1626.5	1562.8	1440.0	1321.5	1188.6	1070.2	1017.7	989.8
7.5°	1830.9	1791.8	1673.4	1475.7	1286.9	1086.9	916.0	842.3	786.4
10°	2014.1	1949.4	1774.0	1496.9	1236.6	971.9	764.1	664.7	614.4
12.5°	2163.8	2090.1	1860.0	1501.4	1169.6	845.7	616.6	506.1	462.5
15°	2258.8	2206.3	1924.8	1491.3	1091.4	720.5	487.1	374.2	337.4
17.5°	2345.9	2278.9	1973.9	1463.4	993.1	599.9	368.6	277.0	250.2
20°	2435.3	2328.1	1997.4	1418.7	887.0	481.5	281.5	224.5	208.9
22.5°	2529.1	2364.9	1995.2	1359.5	793.1	386.5	230.1	188.8	174.3
25°	2611.8	2390.6	1973.9	1278.0	661.3	303.9	192.1	162.0	150.8
27.5°	2626.3	2394.0	1929.2	1177.4	548.5	248.0	166.4	143.0	136.3
30°	2580.5	2380.6	1853.3	1063.5	446.8	207.8	145.2	132.9	127.4
32.5°	2509.0	2358.2	1712.5	938.4	357.5	178.7	132.9	125.1	120.6
35°	2428.6	2297.9	1628.7	804.3	284.9	154.2	124.0	118.4	113.9
37.5°	2352.6	2186.2	1491.3	672.5	231.2	134.1	115.1	111.7	108.4
40°	2266.6	2044.3	1333.8	542.9	181.0	120.6	106.1	103.9	101.7
42.5°	2094.6	1860.0	1155.1	406.6	149.7	107.2	97.2	95.0	92.7
45°	1895.7	1652.2	945.1	291.6	121.8	95.0	87.1	86.0	84.9
47.5°	1684.6	1423.2	718.3	197.7	99.4	84.9	78.2	78.2	77.1
50°	1427.7	1146.2	502.7	131.8	86.0	74.8	71.5	70.4	72.6
52.5°	1044.5	837.8	319.5	97.2	73.7	67.0	64.8	67.0	68.1
55°	714.9	555.2	198.8	80.4	64.8	59.2	60.3	63.7	61.4
57.5°	515.0	382.1	131.8	65.9	55.9	52.5	55.9	61.4	63.7
60°	391.0	275.9	89.4	54.7	46.9	48.0	52.5	60.3	62.6
62.5°	282.6	184.3	63.7	43.6	40.2	43.6	50.3	58.1	59.2
65°	177.6	102.8	45.8	34.6	34.6	40.2	48.0	54.7	55.9
67.5°	90.5	53.6	31.3	27.9	31.3	38.0	44.7	50.3	51.4
70°	32.4	26.8	22.3	23.5	27.9	34.6	40.2	44.7	45.8
72.5°	15.6	16.8	16.8	20.1	25.7	31.3	35.7	39.1	40.2
75°	11.2	12.3	13.4	16.8	22.3	26.8	31.3	33.5	34.6
77.5°	8.9	10.1	11.2	14.5	19.0	23.5	25.7	27.9	29.0
80°	7.8	7.8	10.1	12.3	15.6	17.9	20.1	22.3	22.3
82.5°	5.6	6.7	7.8	10.1	11.2	13.4	14.5	16.8	16.8
85°	4.5	4.5	5.6	6.7	7.8	8.9	10.1	11.2	10.1
87.5°	2.2	2.2	3.4	3.4	4.5	4.5	4.5	4.5	4.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)