

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: P130104

Luminaire Tested: **HL618TAT - HLM6930 - HL6WFL - 455H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P130104
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 - HLM6930 - 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 / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2137.0 lumens
Efficiency: N/A
Efficacy: 77.4 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

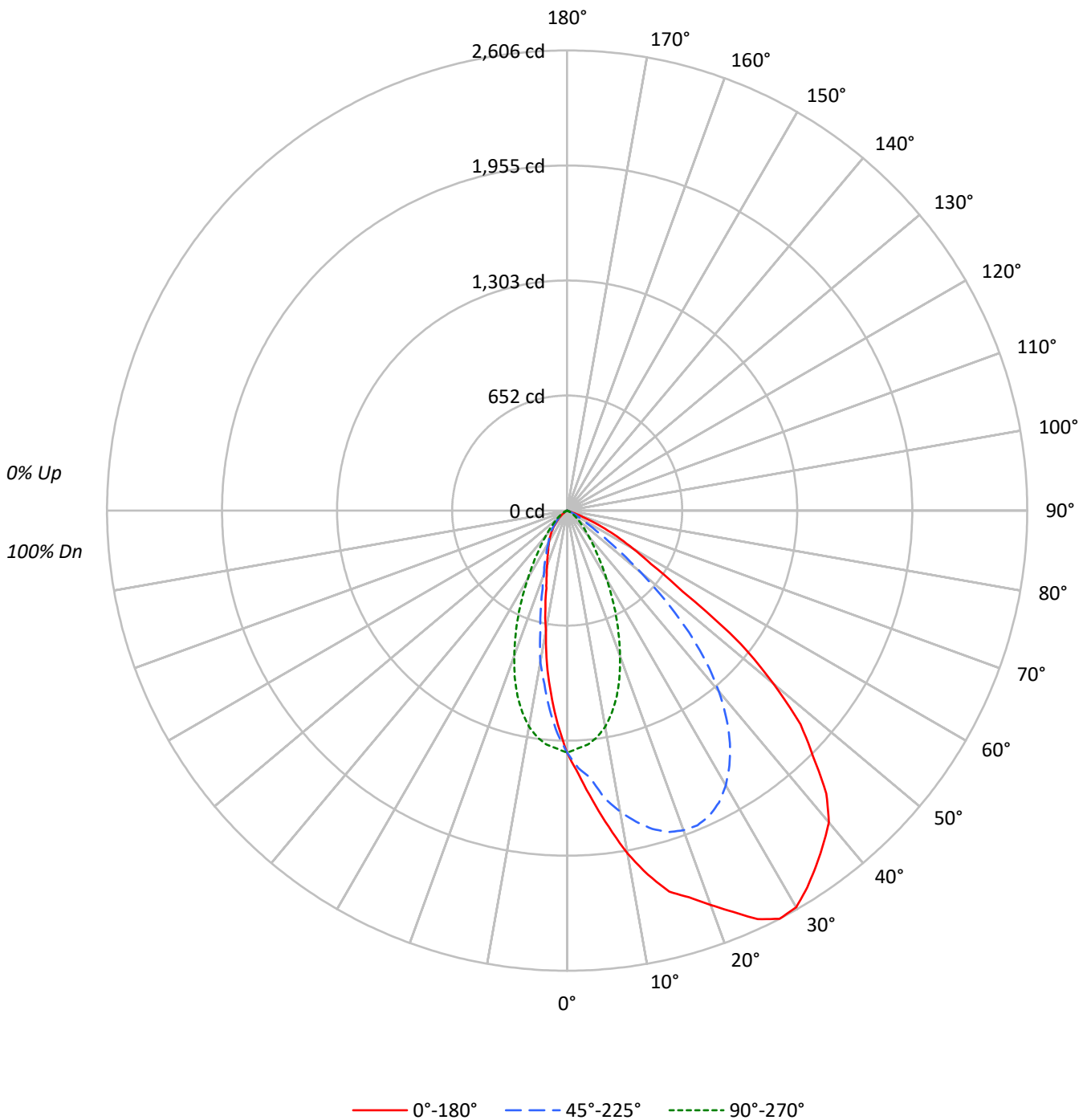
Input Watts (W): 27.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P130104

CATALOG NUMBER: HL618TAT - HLM6930 - HL6WFL - 455H

Luminous Intensity Polar Plot





TEST NUMBER: P130104

CATALOG NUMBER: HL618TAT - HLM6930 - HL6WFL - 455H

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	81812	81812	81812
5°	96415	77940	61017
10°	114165	71910	40216
15°	128906	62644	26248
20°	137635	50674	19224
25°	149619	38325	14943
30°	155004	26598	12280
35°	150990	17897	9726
40°	146919	12252	7353
45°	131433	8357	5055
50°	107520	5579	3026
55°	60276	3734	1577
60°	35220	2248	719
65°	19479	1089	297
70°	4439	444	0
75°	382	255	0
80°	0	302	0
85°	0	373	0



TEST NUMBER: P130104

CATALOG NUMBER: HL618TAT - HLM6930 - HL6WFL - 455H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.0	5.9
10°-20°	344.3	16.1
20°-30°	487.8	22.8
30°-40°	530.8	24.8
40°-50°	422.6	19.8
50°-60°	178.5	8.4
60°-70°	41.6	1.9
70°-80°	3.2	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°	959.1	44.9
0°-40°	1489.9	69.7
0°-60°	2091.0	97.9
0°-90°	2137.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2137.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1371	1371	1371	1371	1371	
5°	1646	1519	1331	1133	1042	167
15°	2234	1866	1086	574	455	630
25°	2553	1907	654	284	255	1173
35°	2458	1608	291	168	158	1539
45°	1971	976	125	88	76	1512
55°	799	206	50	30	21	792
65°	216	34	12	6	3	216
75°	3	2	2	1	0	10
85°	0	1	2	1	0	0
90°	0	0	0	0	0	



TEST NUMBER: P130104

CATALOG NUMBER: HL618TAT - HLM6930 - HL6WFL - 455H

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1370.6	1370.6	1370.6	1370.6	1370.6	1370.6	1370.6	1370.6	1370.6
2.5°	1493.7	1504.7	1459.6	1414.5	1348.6	1322.2	1264.0	1240.9	1211.2
5°	1646.5	1642.1	1519.0	1455.2	1331.0	1243.1	1133.2	1082.6	1042.0
7.5°	1806.9	1792.6	1646.5	1480.5	1294.7	1145.3	990.3	914.5	877.1
10°	1971.8	1934.4	1731.1	1493.7	1242.0	1028.8	871.6	760.6	694.6
12.5°	2111.4	2067.4	1804.7	1493.7	1170.5	907.9	705.6	603.4	570.4
15°	2234.5	2178.4	1866.3	1472.8	1085.9	785.9	573.7	480.3	455.0
17.5°	2296.0	2268.6	1909.1	1439.8	987.0	661.7	463.8	403.4	385.8
20°	2376.3	2312.5	1926.7	1388.2	874.9	541.9	383.6	347.3	331.9
22.5°	2459.8	2347.7	1928.9	1321.1	762.8	442.9	337.4	302.3	291.3
25°	2553.2	2374.1	1906.9	1237.6	654.0	362.7	283.6	263.8	255.0
27.5°	2606.0	2389.5	1863.0	1139.8	545.2	307.7	246.2	239.6	228.6
30°	2593.9	2386.2	1797.0	1023.3	445.1	259.4	214.3	209.9	205.5
32.5°	2530.1	2370.8	1711.3	902.4	359.4	222.0	190.1	185.7	181.4
35°	2457.6	2332.3	1608.0	771.6	291.3	190.1	168.2	162.7	158.3
37.5°	2382.9	2241.1	1481.6	646.3	236.3	162.7	146.2	139.6	135.2
40°	2305.9	2110.3	1337.6	527.6	192.3	141.8	126.4	119.8	115.4
42.5°	2172.9	1942.1	1169.4	402.3	155.0	120.9	106.6	102.2	95.6
45°	1970.7	1717.9	976.0	288.0	125.3	101.1	87.9	79.1	75.8
47.5°	1792.6	1532.2	754.0	195.6	100.0	82.4	69.2	62.6	58.3
50°	1524.5	1260.7	539.7	133.0	79.1	64.8	53.9	47.3	42.9
52.5°	1239.8	917.8	350.6	89.0	63.7	51.7	40.7	34.1	30.8
55°	799.0	615.5	205.5	67.0	49.5	39.6	29.7	22.0	20.9
57.5°	562.7	424.3	126.4	51.7	38.5	28.6	20.9	15.4	13.2
60°	430.8	302.3	82.4	39.6	27.5	19.8	13.2	9.9	8.8
62.5°	318.7	205.5	55.0	28.6	18.7	13.2	8.8	6.6	5.5
65°	216.5	115.4	34.1	18.7	12.1	7.7	5.5	3.3	3.3
67.5°	109.9	55.0	19.8	12.1	7.7	4.4	3.3	2.2	1.1
70°	44.0	19.8	9.9	6.6	4.4	3.3	2.2	1.1	0.0
72.5°	11.0	7.7	5.5	3.3	3.3	2.2	1.1	1.1	0.0
75°	3.3	3.3	2.2	2.2	2.2	2.2	1.1	1.1	0.0
77.5°	1.1	1.1	1.1	2.2	2.2	2.2	1.1	1.1	0.0
80°	0.0	1.1	1.1	2.2	2.2	2.2	1.1	0.0	0.0
82.5°	0.0	1.1	1.1	2.2	2.2	2.2	1.1	0.0	0.0
85°	0.0	1.1	1.1	2.2	2.2	2.2	1.1	0.0	0.0
87.5°	0.0	1.1	1.1	2.2	2.2	2.2	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)