

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: P130103

Luminaire Tested: **HL618TAT - HLM6927 - HL6WFL - 455H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P130103  
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 - HLM6927 - 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 / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2003.0 lumens  
Efficiency: N/A  
Efficacy: 72.6 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

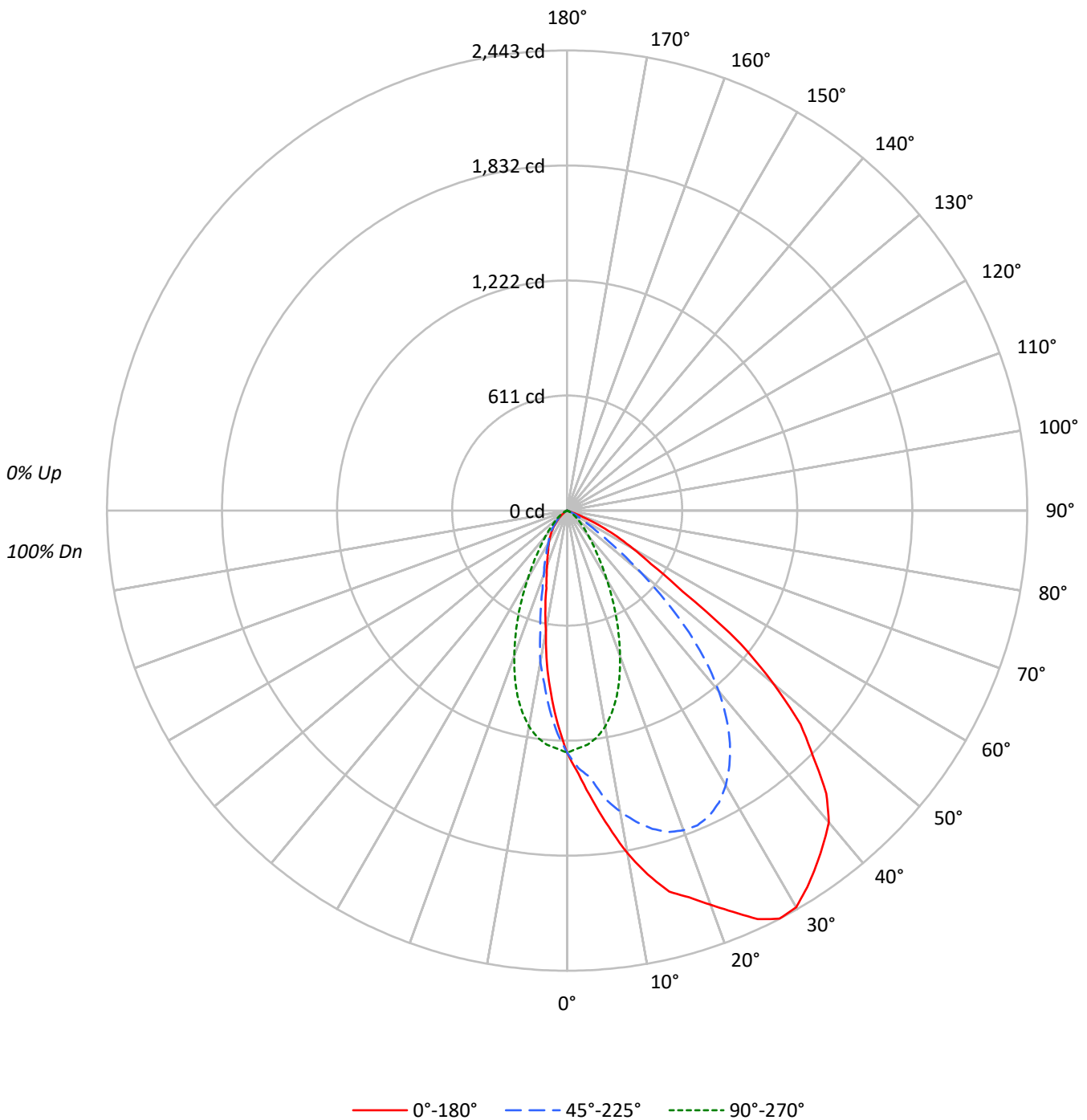
Input Watts (W): 27.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P130103

CATALOG NUMBER: HL618TAT - HLM6927 - HL6WFL - 455H

### Luminous Intensity Polar Plot





TEST NUMBER: P130103

CATALOG NUMBER: HL618TAT - HLM6927 - 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°	76685	76685	76685
5°	90372	73056	57187
10°	107008	67400	37698
15°	120824	58722	24604
20°	129005	47500	18019
25°	140242	35922	14005
30°	145288	24931	11515
35°	141528	16773	9117
40°	137713	11488	6894
45°	123196	7830	4742
50°	100777	5233	2835
55°	56504	3500	1479
60°	33013	2109	670
65°	18264	1017	279
70°	4156	414	0
75°	359	243	0
80°	0	288	0
85°	0	356	0



TEST NUMBER: P130103

CATALOG NUMBER: HL618TAT - HLM6927 - HL6WFL - 455H

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.1	5.9
10°-20°	322.7	16.1
20°-30°	457.2	22.8
30°-40°	497.5	24.8
40°-50°	396.2	19.8
50°-60°	167.3	8.4
60°-70°	39.0	1.9
70°-80°	3.0	0.1
80°-90°	1.1	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°	899.0	44.9
0°-40°	1396.5	69.7
0°-60°	1960.0	97.9
0°-90°	2003.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2003.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1285	1285	1285	1285	1285	
5°	1543	1424	1248	1062	977	157
15°	2094	1749	1018	538	426	591
25°	2393	1787	613	266	239	1099
35°	2304	1507	273	158	148	1442
45°	1847	915	117	82	71	1417
55°	749	193	46	28	20	743
65°	203	32	11	5	3	203
75°	3	2	2	1	0	9
85°	0	1	2	1	0	0
90°	0	0	0	0	0	



TEST NUMBER: P130103

CATALOG NUMBER: HL618TAT - HLM6927 - HL6WFL - 455H

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1284.7	1284.7	1284.7	1284.7	1284.7	1284.7	1284.7	1284.7	1284.7
2.5°	1400.1	1410.4	1368.1	1325.9	1264.1	1239.3	1184.7	1163.1	1135.3
5°	1543.3	1539.1	1423.8	1364.0	1247.6	1165.2	1062.2	1014.8	976.6
7.5°	1693.7	1680.3	1543.3	1387.7	1213.6	1073.5	928.2	857.1	822.1
10°	1848.2	1813.2	1622.6	1400.1	1164.1	964.3	817.0	712.9	651.1
12.5°	1979.0	1937.8	1691.6	1400.1	1097.2	851.0	661.4	565.6	534.7
15°	2094.4	2041.9	1749.3	1380.5	1017.9	736.6	537.8	450.2	426.5
17.5°	2152.1	2126.4	1789.5	1349.6	925.1	620.2	434.8	378.1	361.6
20°	2227.3	2167.6	1806.0	1301.2	820.1	507.9	359.5	325.5	311.1
22.5°	2305.6	2200.5	1808.0	1238.3	715.0	415.2	316.3	283.3	273.0
25°	2393.2	2225.3	1787.4	1160.0	613.0	340.0	265.8	247.3	239.0
27.5°	2442.6	2239.7	1746.2	1068.3	511.0	288.5	230.8	224.6	214.3
30°	2431.3	2236.6	1684.4	959.1	417.2	243.1	200.9	196.8	192.7
32.5°	2371.6	2222.2	1604.0	845.8	336.9	208.1	178.2	174.1	170.0
35°	2303.6	2186.1	1507.2	723.2	273.0	178.2	157.6	152.5	148.4
37.5°	2233.5	2100.6	1388.7	605.8	221.5	152.5	137.0	130.8	126.7
40°	2161.4	1978.0	1253.8	494.5	180.3	132.9	118.5	112.3	108.2
42.5°	2036.7	1820.4	1096.1	377.1	145.3	113.3	99.9	95.8	89.6
45°	1847.2	1610.2	914.8	269.9	117.4	94.8	82.4	74.2	71.1
47.5°	1680.3	1436.1	706.7	183.4	93.7	77.3	64.9	58.7	54.6
50°	1428.9	1181.7	505.8	124.7	74.2	60.8	50.5	44.3	40.2
52.5°	1162.1	860.2	328.6	83.4	59.8	48.4	38.1	31.9	28.8
55°	749.0	576.9	192.7	62.8	46.4	37.1	27.8	20.6	19.6
57.5°	527.5	397.7	118.5	48.4	36.1	26.8	19.6	14.4	12.4
60°	403.8	283.3	77.3	37.1	25.8	18.5	12.4	9.3	8.2
62.5°	298.8	192.7	51.5	26.8	17.5	12.4	8.2	6.2	5.2
65°	203.0	108.2	31.9	17.5	11.3	7.2	5.2	3.1	3.1
67.5°	103.0	51.5	18.5	11.3	7.2	4.1	3.1	2.1	1.0
70°	41.2	18.5	9.3	6.2	4.1	3.1	2.1	1.0	0.0
72.5°	10.3	7.2	5.2	3.1	3.1	2.1	1.0	1.0	0.0
75°	3.1	3.1	2.1	2.1	2.1	2.1	1.0	1.0	0.0
77.5°	1.0	1.0	1.0	2.1	2.1	2.1	1.0	1.0	0.0
80°	0.0	1.0	1.0	2.1	2.1	2.1	1.0	0.0	0.0
82.5°	0.0	1.0	1.0	2.1	2.1	2.1	1.0	0.0	0.0
85°	0.0	1.0	1.0	2.1	2.1	2.1	1.0	0.0	0.0
87.5°	0.0	1.0	1.0	2.1	2.1	2.1	1.0	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)