

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: P130111

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P130111  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33488)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: HL618TAT - HLM6927 - HL6WFL - 455TBZ  
Description: HALO ALLSLOPE 6" 30W, Tuscan Bronze Reflector, Tuscan Bronze 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: 1962.0 lumens  
Efficiency: N/A  
Efficacy: 71.1 lumens/watt  
Spacing Criteria (0/90/45): 1.38 / 0.75 / 1.12  
Luminous Opening: Vertical Cylinder (Dia: 0.48' x H: 0.1')  
CIE Type: Direct

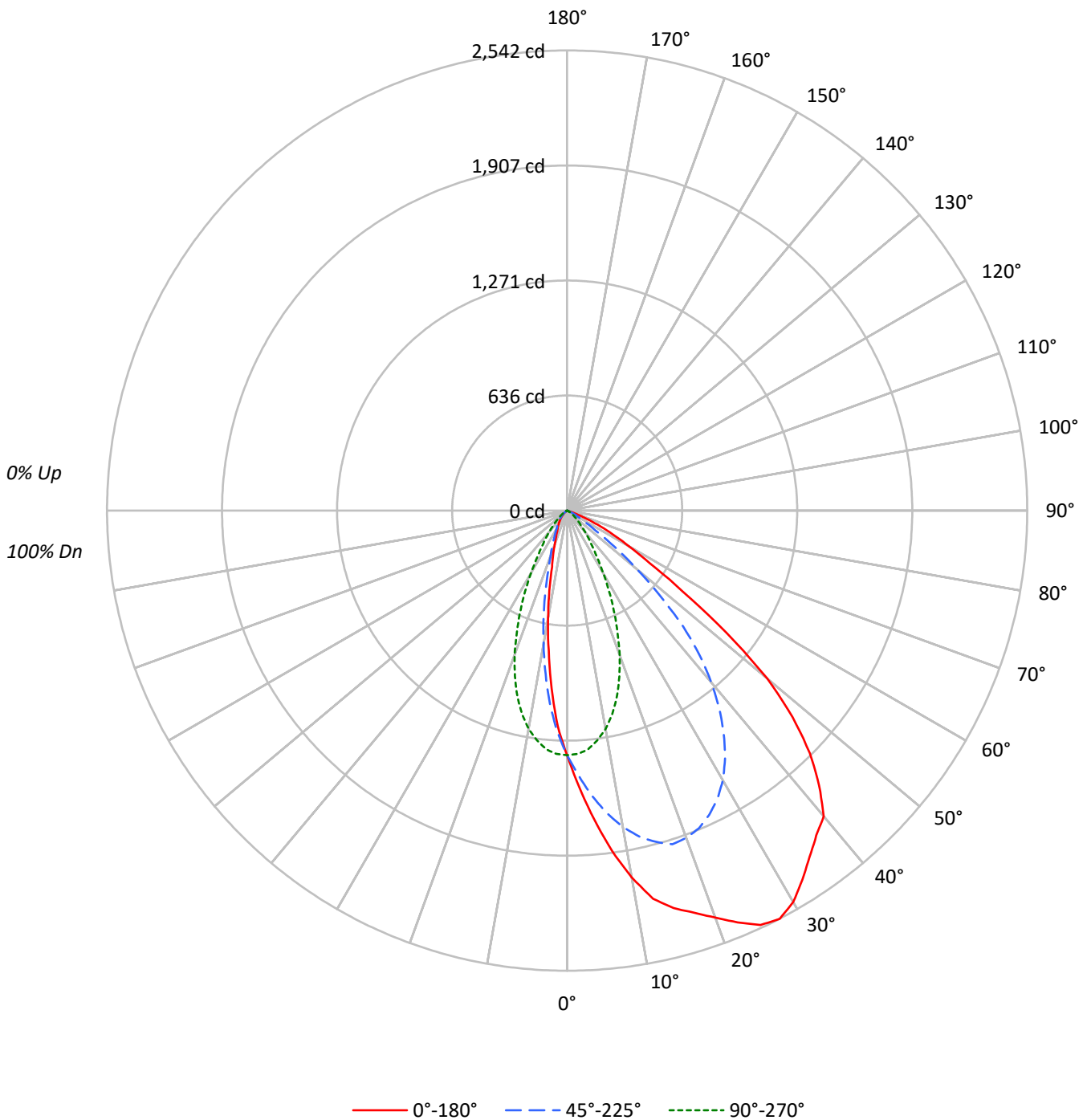
Input Watts (W): 27.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P130111

CATALOG NUMBER: HL618TAT - HLM6927 - HL6WFL - 455TBZ

### Luminous Intensity Polar Plot





TEST NUMBER: P130111

CATALOG NUMBER: HL618TAT - HLM6927 - HL6WFL - 455TBZ

**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	101	99	99	97	96	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	84	82					82			
3	98	90	84	80	96	89	83	79	86	81	78	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	81	75	70	79	74	69	77	72	68	75	71	68	66					66			
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59					59			
6	80	69	62	57	79	69	62	57	67	61	56	65	60	56	64	59	56	54					54			
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49					49			
8	71	59	52	47	69	59	52	47	57	51	47	56	51	47	55	50	46	45					45			
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	43	41					41			
10	63	51	44	40	62	51	44	40	50	44	40	49	43	39	48	43	39	38					38			

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

	0°	90°	180°
0°	80666	80666	80666
5°	100280	77542	57732
10°	119121	70897	35104
15°	131138	61254	18582
20°	138573	49122	11619
25°	148019	35781	7688
30°	149256	23783	5898
35°	143463	14923	4528
40°	140484	9742	3383
45°	126438	6223	2314
50°	101737	3900	1298
55°	58579	2535	407
60°	32187	1423	90
65°	16780	684	0
70°	4267	222	0
75°	382	255	0
80°	0	302	0
85°	0	373	0



TEST NUMBER: P130111

CATALOG NUMBER: HL618TAT - HLM6927 - HL6WFL - 455TBZ

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.1	6.4
10°-20°	331.4	16.9
20°-30°	452.8	23.1
30°-40°	478.8	24.4
40°-50°	377.6	19.2
50°-60°	157.4	8.0
60°-70°	35.2	1.8
70°-80°	2.9	0.1
80°-90°	0.9	0.0
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°	909.3	46.3
0°-40°	1388.1	70.7
0°-60°	1923.0	98.0
0°-90°	1962.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1962.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1351	1351	1351	1351	1351	
5°	1712	1582	1324	1076	986	174
15°	2273	1895	1062	462	322	644
25°	2526	1856	611	174	131	1156
35°	2335	1509	243	90	74	1467
45°	1896	906	93	47	35	1438
55°	776	190	34	13	5	740
65°	186	30	8	1	0	194
75°	3	2	2	1	0	10
85°	0	1	2	1	0	0
90°	0	0	0	0	0	



TEST NUMBER: P130111

CATALOG NUMBER: HL618TAT - HLM6927 - HL6WFL - 455TBZ

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1351.4	1351.4	1351.4	1351.4	1351.4	1351.4	1351.4	1351.4	1351.4
2.5°	1527.1	1495.6	1466.3	1405.6	1345.9	1299.3	1224.5	1181.1	1191.9
5°	1712.5	1661.5	1582.4	1454.4	1324.2	1203.9	1075.9	1001.0	985.9
7.5°	1894.7	1823.1	1686.5	1513.0	1279.8	1091.1	912.1	805.8	780.9
10°	2057.4	1967.4	1774.3	1496.7	1224.5	966.3	750.5	631.2	606.3
12.5°	2196.2	2088.9	1844.8	1494.5	1151.8	852.5	598.7	477.2	452.3
15°	2273.2	2185.4	1894.7	1471.7	1061.8	705.0	462.0	351.4	322.1
17.5°	2328.5	2246.1	1932.7	1430.5	958.7	581.3	348.1	266.8	254.9
20°	2392.5	2267.8	1924.0	1372.0	848.1	460.9	266.8	214.7	200.6
22.5°	2461.9	2283.0	1900.1	1303.6	724.5	356.8	216.9	171.4	161.6
25°	2525.9	2286.2	1855.7	1214.7	610.6	277.6	173.5	137.7	131.2
27.5°	2542.2	2275.4	1796.0	1104.1	501.1	222.3	142.1	116.0	112.8
30°	2497.7	2249.4	1720.1	989.1	398.0	181.1	116.0	100.9	98.7
32.5°	2417.5	2219.0	1623.6	865.5	309.1	148.6	101.9	88.9	85.7
35°	2335.1	2162.6	1508.6	740.8	242.9	123.6	90.0	77.0	73.7
37.5°	2261.3	2063.9	1380.6	617.1	196.3	103.0	78.1	66.2	62.9
40°	2204.9	1941.4	1237.5	496.7	152.9	90.0	67.2	56.4	53.1
42.5°	2060.7	1776.5	1083.5	370.9	119.3	77.0	56.4	47.7	44.5
45°	1895.8	1598.6	905.6	252.7	93.3	62.9	46.6	38.0	34.7
47.5°	1689.7	1387.1	694.1	171.4	72.7	49.9	35.8	28.2	27.1
50°	1442.5	1137.7	503.2	111.7	55.3	39.0	26.0	20.6	18.4
52.5°	1109.5	864.4	327.5	73.7	43.4	29.3	19.5	13.0	10.8
55°	776.5	578.1	189.8	54.2	33.6	21.7	13.0	7.6	5.4
57.5°	539.0	380.7	115.0	41.2	24.9	15.2	7.6	3.3	2.2
60°	393.7	272.2	71.6	30.4	17.4	9.8	3.3	1.1	1.1
62.5°	283.1	183.3	46.6	22.8	11.9	5.4	2.2	1.1	1.1
65°	186.5	106.3	30.4	15.2	7.6	3.3	1.1	1.1	0.0
67.5°	103.0	53.1	18.4	8.7	4.3	2.2	1.1	1.1	0.0
70°	42.3	23.9	9.8	4.3	2.2	2.2	1.1	0.0	0.0
72.5°	11.9	8.7	4.3	2.2	2.2	2.2	1.1	0.0	0.0
75°	3.3	3.3	2.2	2.2	2.2	2.2	1.1	0.0	0.0
77.5°	1.1	1.1	1.1	2.2	2.2	2.2	1.1	0.0	0.0
80°	0.0	1.1	1.1	1.1	2.2	1.1	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	0.0	1.1	1.1	2.2	1.1	1.1	0.0	0.0
87.5°	0.0	0.0	1.1	1.1	2.2	1.1	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)