

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: P130100

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P130100  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33486)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: HL618TAT - HLM6930 - HL6WFL - 455SC  
Description: HALO ALLSLOPE 6" 30W, Specular Clear 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: 2146.6 lumens  
Efficiency: N/A  
Efficacy: 77.8 lumens/watt  
Spacing Criteria (0/90/45): 1.47 / 0.84 / 1.17  
Luminous Opening: Vertical Cylinder (Dia: 0.48' x H: 0.1')  
CIE Type: Direct

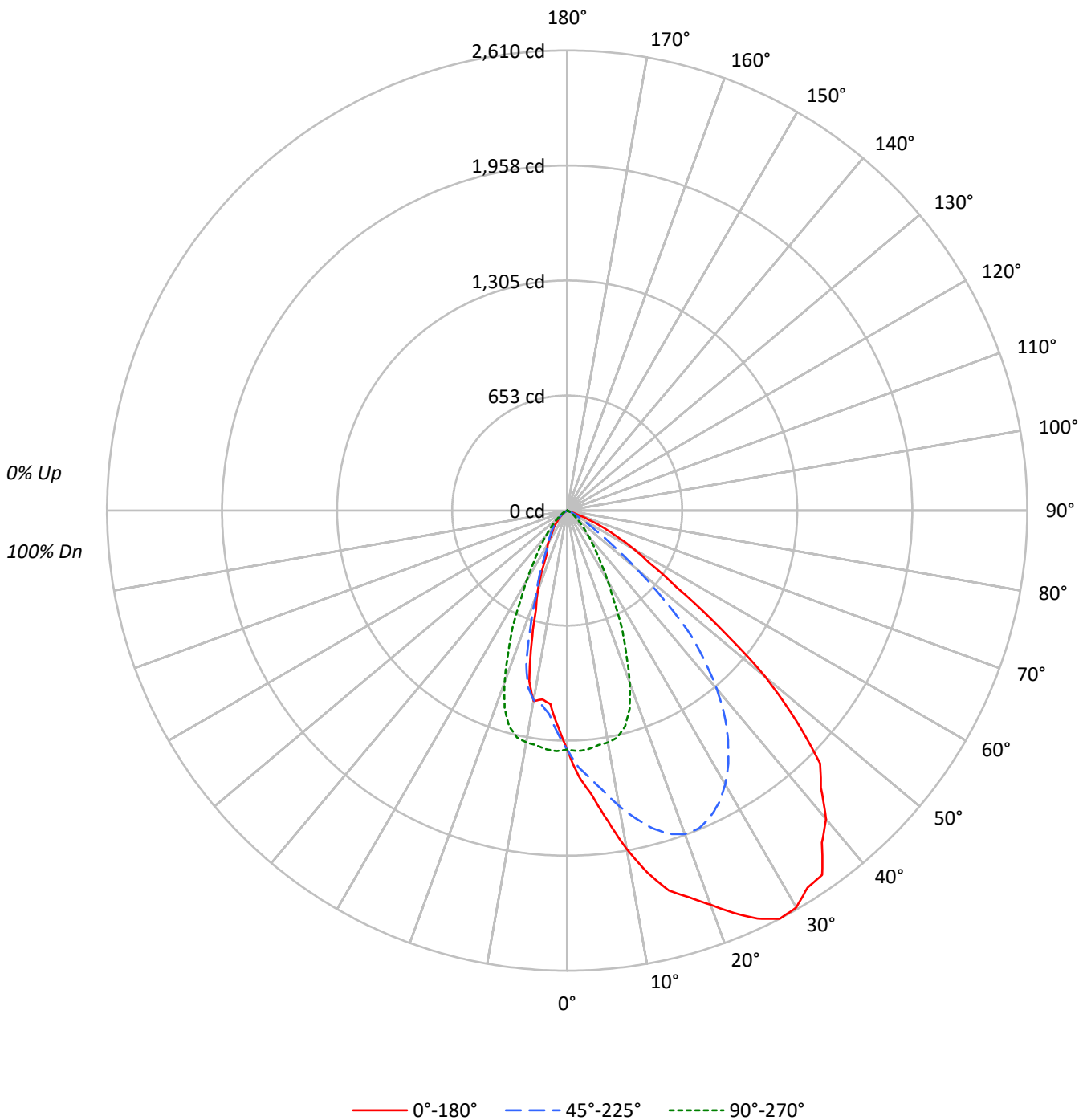
Input Watts (W): 27.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91				91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82				82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				74
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66				66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60				60
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54				54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49				49
8	71	59	52	47	69	59	52	47	58	51	47	57	51	47	55	50	47	45				45
9	67	55	48	44	65	55	48	43	54	48	43	53	47	43	52	47	43	41				41
10	63	51	45	40	62	51	44	40	50	44	40	49	44	40	48	43	40	38				38

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

	0°	90°	180°
0°	80929	80929	80929
5°	94898	79585	64460
10°	112891	77301	63480
15°	128698	73121	44951
20°	137803	60156	28282
25°	149636	42854	16033
30°	155327	27351	13159
35°	154940	17878	8773
40°	145543	11946	6805
45°	135268	7997	4508
50°	103613	5071	2461
55°	57221	3289	490
60°	35817	1962	0
65°	19317	783	0
70°	2643	222	0
75°	255	127	0
80°	0	302	0
85°	0	373	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.5	6.1
10°-20°	380.8	17.7
20°-30°	499.7	23.3
30°-40°	521.3	24.3
40°-50°	408.8	19.0
50°-60°	164.9	7.7
60°-70°	37.8	1.8
70°-80°	2.0	0.1
80°-90°	0.8	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°	1011.1	47.1
0°-40°	1532.3	71.4
0°-60°	2106.0	98.1
0°-90°	2146.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2146.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1356	1356	1356	1356	1356	
5°	1621	1526	1359	1160	1101	165
15°	2231	1865	1268	895	779	630
25°	2554	1919	731	334	274	1175
35°	2522	1591	291	164	143	1547
45°	2028	981	120	77	68	1501
55°	758	204	44	23	6	745
65°	215	32	9	1	0	215
75°	2	2	1	1	0	6
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°	1355.8	1355.8	1355.8	1355.8	1355.8	1355.8	1355.8	1355.8	1355.8
2.5°	1508.4	1459.3	1456.1	1396.1	1365.6	1312.2	1261.0	1234.8	1221.7
5°	1620.6	1555.2	1525.8	1439.7	1359.1	1250.1	1159.6	1117.1	1100.8
7.5°	1776.5	1688.2	1607.5	1465.9	1342.7	1196.7	1110.6	1082.2	1080.1
10°	1949.8	1832.1	1702.4	1496.4	1335.1	1164.0	1092.0	1092.0	1096.4
12.5°	2103.4	1970.5	1787.4	1531.3	1317.6	1118.2	1025.6	1010.3	992.9
15°	2230.9	2089.3	1864.7	1542.2	1267.5	1032.1	894.8	809.8	779.2
17.5°	2299.6	2183.0	1922.5	1528.0	1178.1	890.4	691.0	602.7	589.6
20°	2379.2	2235.3	1953.0	1475.7	1038.6	698.6	516.6	495.9	488.3
22.5°	2470.7	2271.3	1951.9	1387.4	873.0	528.6	420.7	391.3	377.1
25°	2553.5	2296.3	1919.2	1278.4	731.3	406.5	333.5	280.1	273.6
27.5°	2610.2	2308.3	1866.9	1149.8	570.0	329.1	255.0	233.2	243.0
30°	2599.3	2302.9	1792.8	1020.1	457.7	265.9	208.2	214.7	220.2
32.5°	2536.1	2288.7	1701.3	890.4	360.7	219.1	187.5	183.1	175.5
35°	2521.9	2248.4	1591.2	759.6	291.0	183.1	163.5	147.1	142.8
37.5°	2373.7	2156.8	1466.9	634.3	236.5	155.8	139.5	128.6	127.5
40°	2284.3	2029.3	1319.8	515.5	187.5	134.1	118.8	109.0	106.8
42.5°	2130.7	1863.7	1153.1	391.3	151.5	113.3	99.2	85.0	82.8
45°	2028.2	1672.9	980.9	271.4	119.9	91.5	77.4	69.8	67.6
47.5°	1760.1	1450.6	730.2	188.5	92.6	74.1	61.0	53.4	52.3
50°	1469.1	1169.4	514.4	125.3	71.9	57.8	48.0	39.2	34.9
52.5°	1093.1	844.6	334.6	82.8	56.7	44.7	34.9	24.0	20.7
55°	758.5	574.4	203.8	62.1	43.6	33.8	22.9	12.0	6.5
57.5°	555.8	402.2	125.3	46.9	32.7	24.0	13.1	2.2	0.0
60°	438.1	293.2	78.5	34.9	24.0	15.3	4.4	0.0	0.0
62.5°	316.1	198.4	50.1	24.0	15.3	8.7	1.1	0.0	0.0
65°	214.7	111.2	31.6	16.3	8.7	3.3	1.1	0.0	0.0
67.5°	112.3	52.3	16.3	8.7	4.4	2.2	1.1	0.0	0.0
70°	26.2	16.3	7.6	4.4	2.2	1.1	1.1	0.0	0.0
72.5°	6.5	5.4	3.3	2.2	1.1	1.1	1.1	0.0	0.0
75°	2.2	2.2	2.2	1.1	1.1	1.1	1.1	0.0	0.0
77.5°	0.0	1.1	1.1	1.1	1.1	1.1	1.1	0.0	0.0
80°	0.0	0.0	1.1	1.1	2.2	1.1	1.1	0.0	0.0
82.5°	0.0	0.0	1.1	1.1	2.2	1.1	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)