

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: P130107

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P130107
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33487)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: HL618TAT - HLM6927 - HL6WFL - 455SN
Description: HALO ALLSLOPE 6" 30W, Satin Nickel Reflector, Satin Nickel 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: 1993.0 lumens
Efficiency: N/A
Efficacy: 72.2 lumens/watt
Spacing Criteria (0/90/45): 1.5 / 0.76 / 1.18
Luminous Opening: Vertical Cylinder (Dia: 0.48' x H: 0.1')
CIE Type: Direct

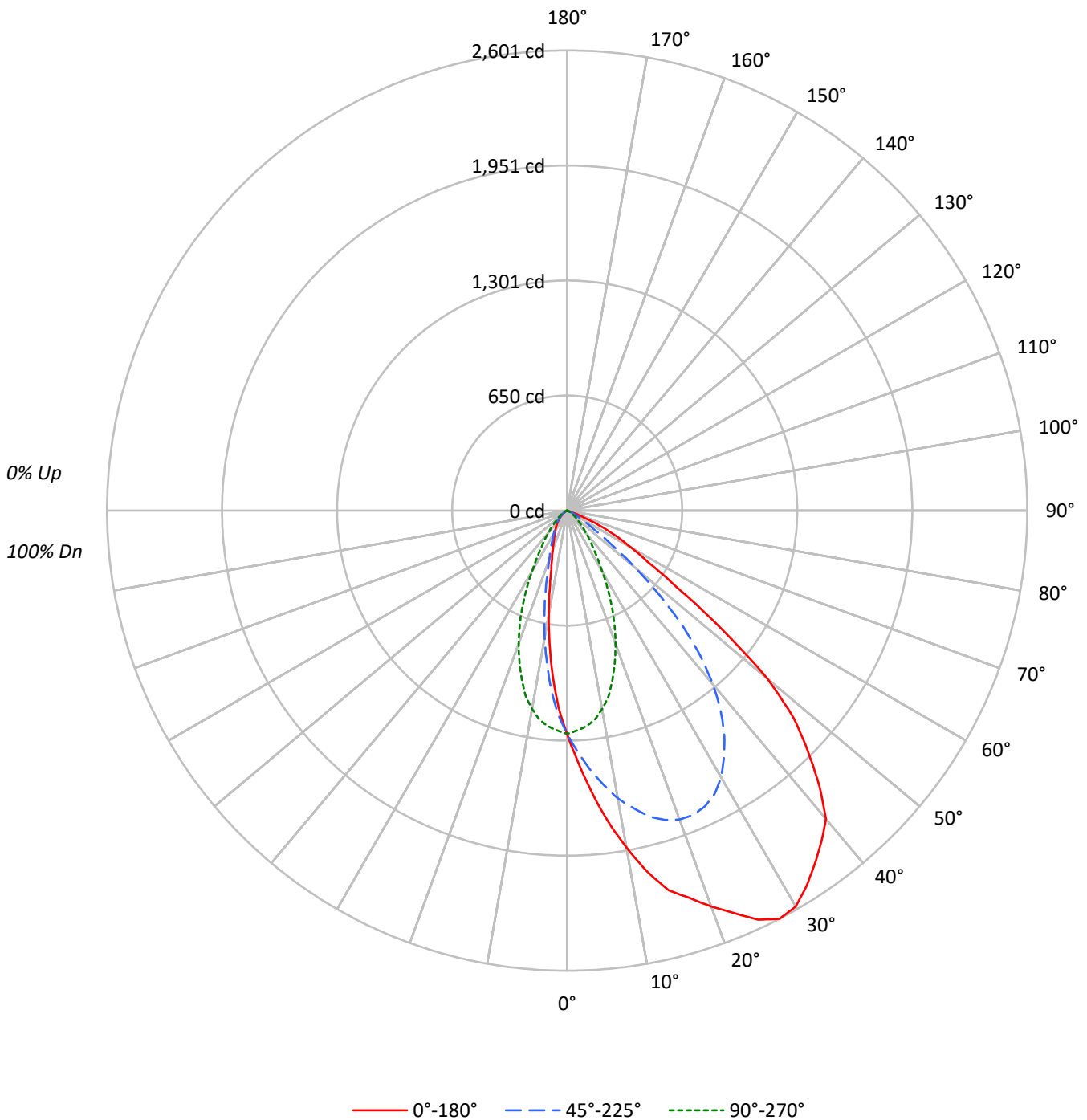
Input Watts (W): 27.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	100	98	99	97	95	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81					81			
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	77	75	73					73			
4	91	82	75	70	89	81	74	70	79	73	69	76	72	68	74	70	67	65					65			
5	85	75	68	62	83	74	67	62	72	66	62	70	65	61	69	64	60	59					59			
6	80	69	61	56	78	68	61	56	66	60	56	65	59	55	63	58	55	53					53			
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48					48			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44					44			
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40					40			
10	62	50	43	39	61	50	43	39	49	43	39	48	42	39	47	42	38	37					37			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	75371	75371	75371
5°	93504	71715	54757
10°	111988	65889	34606
15°	128168	57072	19966
20°	137913	46307	13762
25°	149519	34961	10109
30°	154413	23664	8169
35°	149890	15593	6531
40°	145008	10507	5116
45°	128419	7090	3762
50°	104205	4747	2525
55°	57447	3191	1554
60°	34149	2044	1063
65°	18840	1071	783
70°	3279	545	434
75°	382	382	255
80°	151	302	151
85°	0	373	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.0	5.9
10°-20°	318.2	16.0
20°-30°	455.8	22.9
30°-40°	497.5	25.0
40°-50°	395.2	19.8
50°-60°	163.4	8.2
60°-70°	41.0	2.1
70°-80°	3.8	0.2
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°	891.0	44.7
0°-40°	1388.5	69.7
0°-60°	1947.1	97.7
0°-90°	1993.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1993.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1263	1263	1263	1263	1263	
5°	1597	1467	1225	1021	935	163
15°	2222	1789	989	468	346	627
25°	2552	1844	597	206	172	1172
35°	2440	1549	254	119	106	1527
45°	1926	924	106	67	56	1473
55°	762	188	42	25	21	742
65°	209	32	12	9	9	210
75°	3	2	3	2	2	8
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°	1262.7	1262.7	1262.7	1262.7	1262.7	1262.7	1262.7	1262.7	1262.7
2.5°	1423.3	1376.6	1364.7	1338.7	1244.3	1204.1	1153.1	1115.2	1113.0
5°	1596.8	1522.0	1466.7	1365.8	1224.7	1120.6	1020.8	948.1	935.1
7.5°	1772.6	1685.8	1561.0	1397.2	1192.2	1023.0	872.2	775.6	759.4
10°	1934.2	1814.9	1652.2	1413.5	1138.0	908.0	730.1	618.3	597.7
12.5°	2090.4	1951.6	1721.6	1414.6	1077.2	790.8	591.2	482.7	453.4
15°	2221.7	2064.4	1788.8	1399.4	989.3	679.1	467.6	366.7	346.1
17.5°	2294.4	2155.5	1833.3	1370.1	897.1	565.2	366.7	295.1	284.2
20°	2381.1	2207.6	1858.3	1325.6	799.5	455.6	294.0	247.3	237.6
22.5°	2461.4	2244.5	1861.5	1266.0	700.8	362.3	246.3	208.3	201.8
25°	2551.5	2271.6	1844.2	1185.7	596.6	291.8	206.1	176.8	172.5
27.5°	2601.4	2283.5	1805.1	1089.1	493.6	243.0	175.7	154.0	153.0
30°	2584.0	2278.1	1740.0	985.0	396.0	202.9	151.9	137.8	136.7
32.5°	2516.8	2260.7	1651.1	864.6	316.8	171.4	134.5	122.6	120.4
35°	2439.7	2215.2	1549.1	730.1	253.8	144.3	119.3	107.4	106.3
37.5°	2359.5	2125.1	1425.4	619.4	209.4	123.7	105.2	94.4	93.3
40°	2275.9	1990.6	1281.2	501.2	164.9	108.5	92.2	82.4	80.3
42.5°	2108.9	1835.5	1116.3	379.7	133.4	94.4	79.2	70.5	68.3
45°	1925.5	1644.6	924.3	277.7	106.3	79.2	67.3	58.6	56.4
47.5°	1738.9	1424.4	711.6	186.6	84.6	65.1	54.2	47.7	46.6
50°	1477.5	1138.0	503.4	122.6	67.3	53.2	42.3	38.0	35.8
52.5°	1102.2	827.7	320.0	80.3	54.2	41.2	33.6	29.3	27.1
55°	761.5	563.0	187.7	61.8	42.3	32.5	25.0	20.6	20.6
57.5°	540.2	394.9	119.3	47.7	33.6	23.9	18.4	15.2	15.2
60°	417.7	283.1	77.0	35.8	25.0	18.4	14.1	11.9	13.0
62.5°	314.6	194.2	51.0	27.1	17.4	13.0	10.8	9.8	10.8
65°	209.4	113.9	32.5	17.4	11.9	8.7	8.7	7.6	8.7
67.5°	108.5	51.0	18.4	10.8	7.6	6.5	6.5	6.5	6.5
70°	32.5	18.4	9.8	6.5	5.4	5.4	4.3	4.3	4.3
72.5°	8.7	6.5	5.4	4.3	3.3	4.3	3.3	3.3	3.3
75°	3.3	3.3	2.2	2.2	3.3	3.3	2.2	2.2	2.2
77.5°	1.1	1.1	1.1	2.2	2.2	2.2	2.2	2.2	1.1
80°	1.1	1.1	1.1	2.2	2.2	2.2	1.1	1.1	1.1
82.5°	0.0	1.1	1.1	2.2	2.2	2.2	1.1	1.1	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	0.0	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)