

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: P130242

Luminaire Tested: **HL612ICAT - HLM6927 - HL6WFL - 455SN**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P130242
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: HL612ICAT - HLM6927 - HL6WFL - 455SN
Description: HALO ALLSLOPE 6" 21W, 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: 1431.8 lumens
Efficiency: N/A
Efficacy: 75.0 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

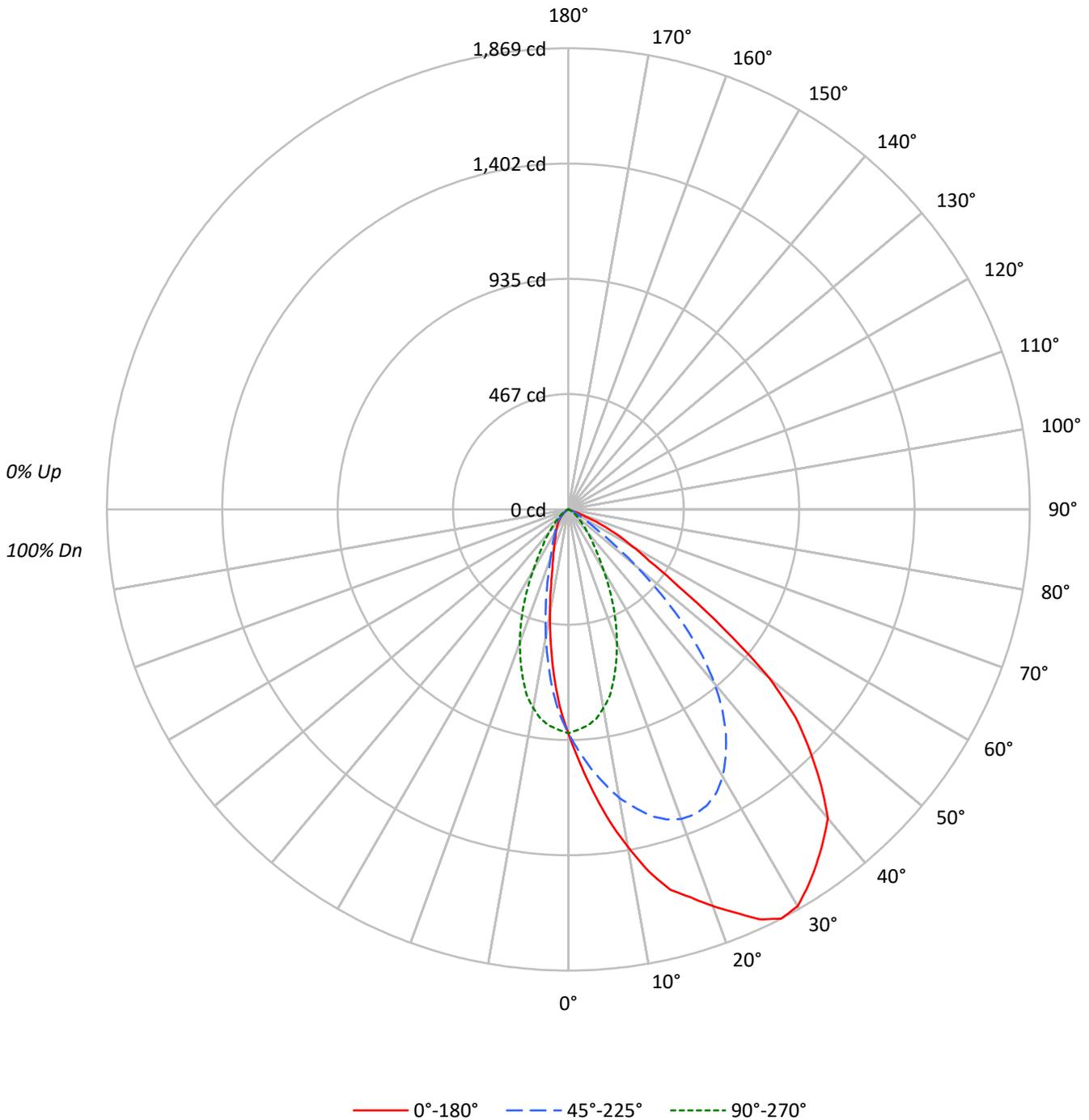
Input Watts (W): 19.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	77	75	73
4	91	82	75	70	89	81	74	70	79	73	69		76	72	68		74	70	67	65
5	85	75	68	62	83	74	67	62	72	66	62		70	65	61		69	64	60	59
6	80	69	61	56	78	68	61	56	66	60	56		65	59	55		63	58	55	53
7	75	63	56	51	73	63	56	51	61	55	50		60	54	50		59	54	50	48
8	70	58	51	46	69	58	51	46	57	50	46		55	50	46		54	49	45	44
9	66	54	47	42	64	54	47	42	53	46	42		52	46	42		51	45	42	40
10	62	50	43	39	61	50	43	39	49	43	39		48	42	39		47	42	38	37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	54151	54151	54151
5°	67177	51525	39339
10°	80456	47332	24862
15°	92077	41005	14341
20°	99083	33269	9887
25°	107415	25116	7261
30°	110933	17001	5868
35°	107688	11206	4694
40°	104180	7550	3676
45°	92257	5095	2701
50°	74865	3407	1813
55°	41273	2293	1117
60°	24526	1463	768
65°	13532	774	558
70°	2361	393	313
75°	266	266	185
80°	110	219	110
85°	0	271	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.1	5.9
10°-20°	228.6	16.0
20°-30°	327.4	22.9
30°-40°	357.4	25.0
40°-50°	283.9	19.8
50°-60°	117.4	8.2
60°-70°	29.4	2.1
70°-80°	2.7	0.2
80°-90°	0.9	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°	640.1	44.7
0°-40°	997.5	69.7
0°-60°	1398.8	97.7
0°-90°	1431.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1431.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	907	907	907	907	907	
5°	1147	1054	880	733	672	117
15°	1596	1285	711	336	249	451
25°	1833	1325	429	148	124	842
35°	1753	1113	182	86	76	1097
45°	1383	664	76	48	40	1058
55°	547	135	30	18	15	533
65°	150	23	9	6	6	151
75°	2	2	2	2	2	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°	907.2	907.2	907.2	907.2	907.2	907.2	907.2	907.2	907.2
2.5°	1022.5	989.0	980.4	961.7	893.9	865.1	828.4	801.2	799.6
5°	1147.2	1093.4	1053.7	981.2	879.9	805.1	733.4	681.2	671.8
7.5°	1273.5	1211.1	1121.5	1003.8	856.5	734.9	626.6	557.2	545.5
10°	1389.6	1303.9	1186.9	1015.5	817.5	652.3	524.5	444.2	429.4
12.5°	1501.8	1402.0	1236.8	1016.3	773.9	568.1	424.7	346.8	325.8
15°	1596.1	1483.1	1285.1	1005.4	710.8	487.9	335.9	263.4	248.6
17.5°	1648.3	1548.6	1317.1	984.3	644.5	406.0	263.4	212.0	204.2
20°	1710.7	1586.0	1335.0	952.4	574.4	327.3	211.2	177.7	170.7
22.5°	1768.3	1612.5	1337.4	909.5	503.5	260.3	176.9	149.6	145.0
25°	1833.0	1632.0	1324.9	851.8	428.6	209.6	148.1	127.0	123.9
27.5°	1868.9	1640.5	1296.8	782.5	354.6	174.6	126.3	110.7	109.9
30°	1856.4	1636.6	1250.1	707.6	284.5	145.7	109.1	99.0	98.2
32.5°	1808.1	1624.2	1186.2	621.1	227.6	123.1	96.6	88.1	86.5
35°	1752.8	1591.4	1112.9	524.5	182.4	103.7	85.7	77.2	76.4
37.5°	1695.1	1526.7	1024.1	445.0	150.4	88.8	75.6	67.8	67.0
40°	1635.1	1430.1	920.4	360.1	118.5	77.9	66.2	59.2	57.7
42.5°	1515.1	1318.7	802.0	272.8	95.9	67.8	56.9	50.7	49.1
45°	1383.3	1181.5	664.0	199.5	76.4	56.9	48.3	42.1	40.5
47.5°	1249.3	1023.3	511.3	134.0	60.8	46.8	39.0	34.3	33.5
50°	1061.5	817.5	361.6	88.1	48.3	38.2	30.4	27.3	25.7
52.5°	791.8	594.6	229.9	57.7	39.0	29.6	24.2	21.0	19.5
55°	547.1	404.5	134.8	44.4	30.4	23.4	17.9	14.8	14.8
57.5°	388.1	283.7	85.7	34.3	24.2	17.1	13.2	10.9	10.9
60°	300.0	203.4	55.3	25.7	17.9	13.2	10.1	8.6	9.4
62.5°	226.0	139.5	36.6	19.5	12.5	9.4	7.8	7.0	7.8
65°	150.4	81.8	23.4	12.5	8.6	6.2	6.2	5.5	6.2
67.5°	77.9	36.6	13.2	7.8	5.5	4.7	4.7	4.7	4.7
70°	23.4	13.2	7.0	4.7	3.9	3.9	3.1	3.1	3.1
72.5°	6.2	4.7	3.9	3.1	2.3	3.1	2.3	2.3	2.3
75°	2.3	2.3	1.6	1.6	2.3	2.3	1.6	1.6	1.6
77.5°	0.8	0.8	0.8	1.6	1.6	1.6	1.6	1.6	0.8
80°	0.8	0.8	0.8	1.6	1.6	1.6	0.8	0.8	0.8
82.5°	0.0	0.8	0.8	1.6	1.6	1.6	0.8	0.8	0.0
85°	0.0	0.8	0.8	1.6	1.6	1.6	0.8	0.0	0.0
87.5°	0.0	0.0	0.8	1.6	1.6	1.6	0.8	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)