

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: P130239

Luminaire Tested: **HL612ICAT - HLM6930 - HL6WFL - 455SC**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P130239
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: HL612ICAT - HLM6930 - HL6WFL - 455SC
Description: HALO ALLSLOPE 6" 21W, 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: 1542.1 lumens
Efficiency: N/A
Efficacy: 80.7 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

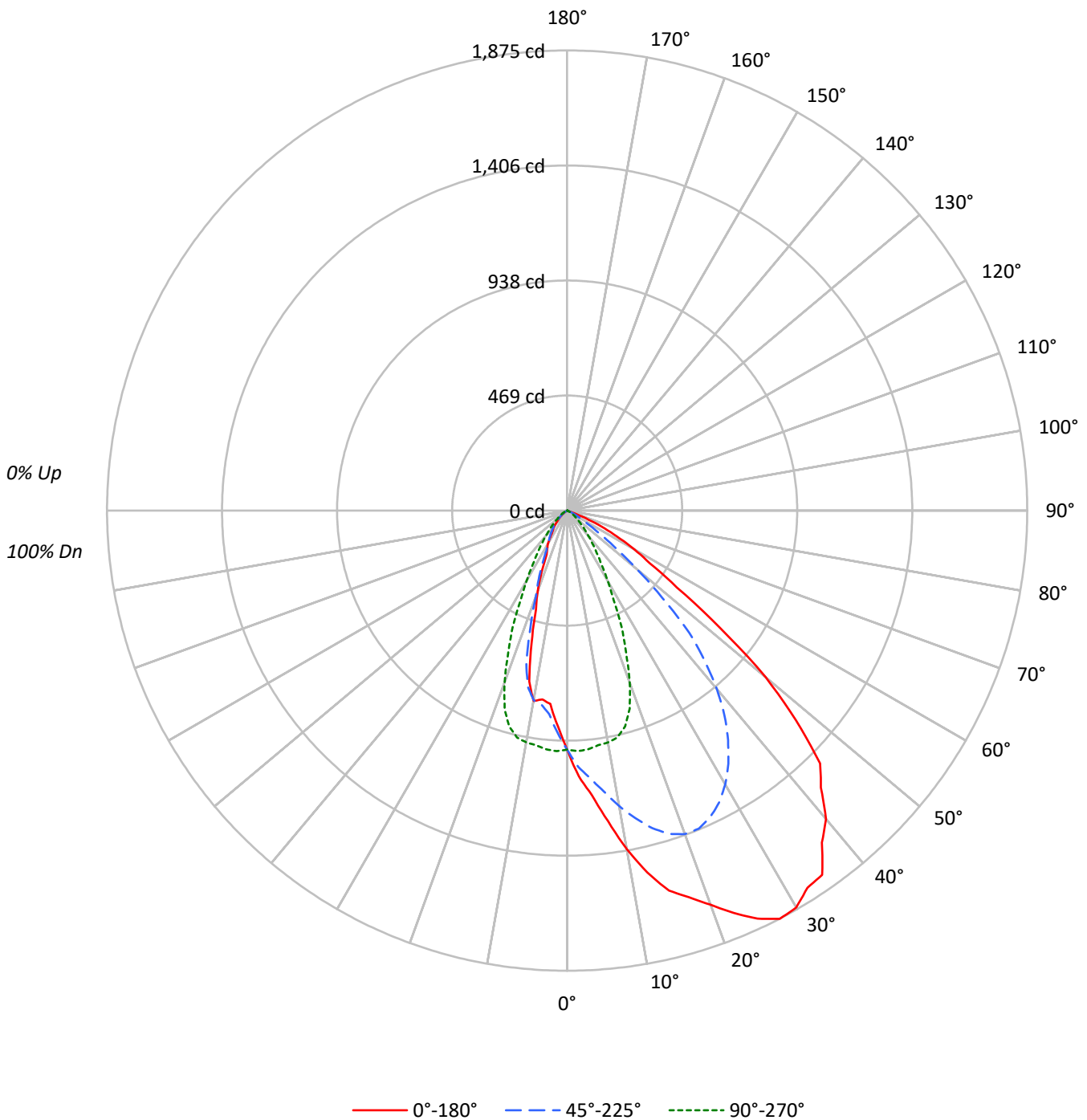
Input Watts (W): 19.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P130239

CATALOG NUMBER: HL612ICAT - HLM6930 - HL6WFL - 455SC

Luminous Intensity Polar Plot





TEST NUMBER: P130239

CATALOG NUMBER: HL612ICAT - HLM6930 - HL6WFL - 455SC

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	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°	58139	58139	58139
5°	68178	57175	46307
10°	81099	55531	45607
15°	92464	52532	32294
20°	98997	43220	20318
25°	107502	30789	11515
30°	111591	19654	9454
35°	111313	12847	6304
40°	104562	8582	4887
45°	97179	5742	3235
50°	74442	3646	1770
55°	41114	2361	355
60°	25736	1406	0
65°	13874	567	0
70°	1896	161	0
75°	185	93	0
80°	0	219	0
85°	0	271	0



TEST NUMBER: P130239

CATALOG NUMBER: HL612ICAT - HLM6930 - HL6WFL - 455SC

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.8	6.1
10°-20°	273.6	17.7
20°-30°	359.0	23.3
30°-40°	374.5	24.3
40°-50°	293.7	19.0
50°-60°	118.5	7.7
60°-70°	27.1	1.8
70°-80°	1.4	0.1
80°-90°	0.6	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°	726.4	47.1
0°-40°	1100.9	71.4
0°-60°	1513.0	98.1
0°-90°	1542.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1542.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	974	974	974	974	974	
5°	1164	1096	976	833	791	119
15°	1603	1340	911	643	560	452
25°	1834	1379	525	240	196	844
35°	1812	1143	209	117	103	1111
45°	1457	705	86	56	48	1078
55°	545	146	31	16	5	535
65°	154	23	6	1	0	154
75°	2	2	1	1	0	4
85°	0	1	2	1	0	0
90°	0	0	0	0	0	



TEST NUMBER: P130239

CATALOG NUMBER: HL612ICAT - HLM6930 - HL6WFL - 455SC

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	974.0	974.0	974.0	974.0	974.0	974.0	974.0	974.0	974.0
2.5°	1083.6	1048.4	1046.1	1003.0	981.1	942.7	905.9	887.1	877.7
5°	1164.3	1117.3	1096.2	1034.3	976.4	898.1	833.1	802.6	790.8
7.5°	1276.3	1212.8	1154.9	1053.1	964.6	859.7	797.9	777.5	775.9
10°	1400.7	1316.2	1223.0	1075.0	959.1	836.2	784.5	784.5	787.7
12.5°	1511.1	1415.6	1284.1	1100.1	946.6	803.3	736.8	725.8	713.3
15°	1602.8	1501.0	1339.7	1107.9	910.6	741.5	642.8	581.8	559.8
17.5°	1652.1	1568.3	1381.2	1097.7	846.4	639.7	496.4	433.0	423.6
20°	1709.2	1605.9	1403.1	1060.2	746.2	501.9	371.1	356.3	350.8
22.5°	1775.0	1631.7	1402.3	996.7	627.2	379.7	302.2	281.1	270.9
25°	1834.5	1649.7	1378.8	918.4	525.4	292.1	239.6	201.2	196.5
27.5°	1875.2	1658.3	1341.2	826.0	409.5	236.5	183.2	167.6	174.6
30°	1867.4	1654.4	1288.0	732.9	328.9	191.0	149.5	154.2	158.2
32.5°	1822.0	1644.3	1222.2	639.7	259.2	157.4	134.7	131.5	126.1
35°	1811.8	1615.3	1143.1	545.7	209.1	131.5	117.4	105.7	102.6
37.5°	1705.3	1549.5	1053.9	455.7	169.9	112.0	100.2	92.4	91.6
40°	1641.1	1457.9	948.2	370.3	134.7	96.3	85.3	78.3	76.7
42.5°	1530.7	1338.9	828.4	281.1	108.8	81.4	71.3	61.1	59.5
45°	1457.1	1201.9	704.7	195.0	86.1	65.8	55.6	50.1	48.5
47.5°	1264.5	1042.1	524.6	135.5	66.6	53.2	43.8	38.4	37.6
50°	1055.5	840.1	369.6	90.0	51.7	41.5	34.5	28.2	25.1
52.5°	785.3	606.8	240.4	59.5	40.7	32.1	25.1	17.2	14.9
55°	545.0	412.6	146.4	44.6	31.3	24.3	16.4	8.6	4.7
57.5°	399.3	288.9	90.0	33.7	23.5	17.2	9.4	1.6	0.0
60°	314.8	210.6	56.4	25.1	17.2	11.0	3.1	0.0	0.0
62.5°	227.1	142.5	36.0	17.2	11.0	6.3	0.8	0.0	0.0
65°	154.2	79.9	22.7	11.7	6.3	2.3	0.8	0.0	0.0
67.5°	80.6	37.6	11.7	6.3	3.1	1.6	0.8	0.0	0.0
70°	18.8	11.7	5.5	3.1	1.6	0.8	0.8	0.0	0.0
72.5°	4.7	3.9	2.3	1.6	0.8	0.8	0.8	0.0	0.0
75°	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.0	0.0
77.5°	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0
80°	0.0	0.0	0.8	0.8	1.6	0.8	0.8	0.0	0.0
82.5°	0.0	0.0	0.8	0.8	1.6	0.8	0.8	0.0	0.0
85°	0.0	0.0	0.8	0.8	1.6	0.8	0.8	0.0	0.0
87.5°	0.0	0.0	0.8	0.8	1.6	0.8	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)