

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: P130259

Luminaire Tested: **HL612ICAT - HLM6930 - HL6WFL - 70PS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P130259
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33491)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: HL612ICAT - HLM6930 - HL6WFL - 70PS
Description: HALO ALLSLOPE 6" 21W, Albalite Glass Lens, White Polymer Trim Ring
"Dead Front", Wet Location - Showerlight 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: 854.6 lumens
Efficiency: N/A
Efficacy: 44.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.05 / 1.23
Luminous Opening: Vertical Cylinder (Dia: 0.48' x H: 0.1')
CIE Type: Direct

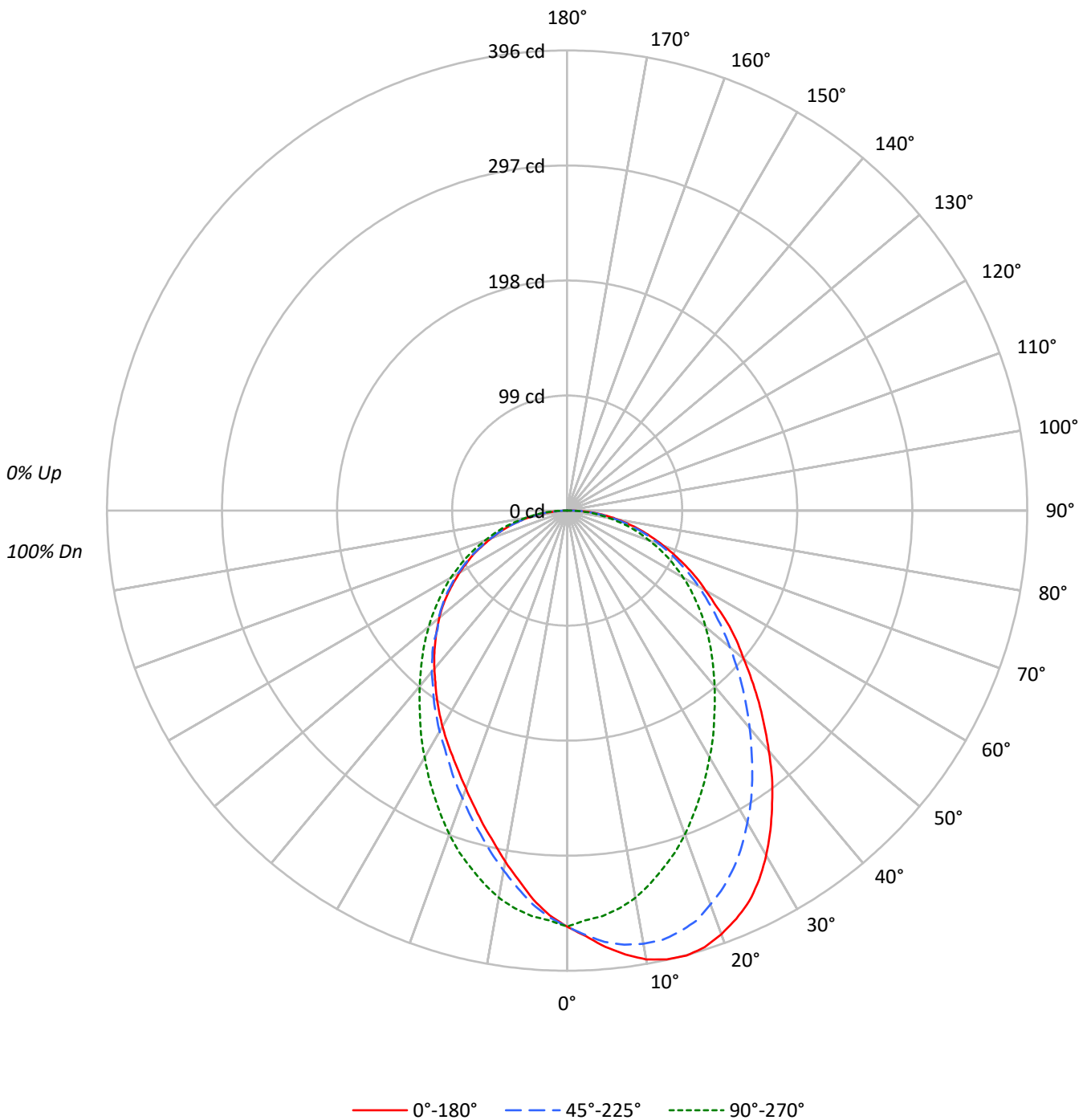
Input Watts (W): 19.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	75	72	70
3	91	80	72	66	88	78	71	65	76	69	64	73	67	63	70	66	62	59
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31
9	58	44	36	31	56	44	36	31	43	35	31	42	35	30	41	35	30	28
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	21369	21369	21369
5°	22064	20513	19664
10°	22708	19593	17763
15°	22874	18385	16118
20°	22467	17173	14746
25°	21735	15875	13671
30°	20479	14652	12818
35°	18898	13547	12023
40°	17203	12577	11322
45°	15560	11738	10711
50°	13979	10967	10128
55°	12696	10184	9475
60°	11249	9434	8731
65°	10149	8610	7998
70°	8877	7586	6981
75°	7619	6531	5940
80°	6088	5032	4456
85°	4054	3189	2460



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.5	3.9
10°-20°	92.7	10.8
20°-30°	132.2	15.5
30°-40°	148.3	17.3
40°-50°	144.2	16.9
50°-60°	126.0	14.7
60°-70°	96.9	11.3
70°-80°	60.4	7.1
80°-90°	20.4	2.4
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°	258.4	30.2
0°-40°	406.7	47.6
0°-60°	676.9	79.2
0°-90°	854.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	854.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	358	358	358	358	358	
5°	377	373	350	340	336	36
15°	396	375	319	288	279	112
25°	371	339	271	240	233	170
35°	308	278	220	200	196	192
45°	233	213	176	163	161	180
55°	168	156	135	127	126	150
65°	113	107	96	90	89	112
75°	66	63	56	51	51	70
85°	24	21	19	15	14	26
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°	358.0	358.0	358.0	358.0	358.0	358.0	358.0	358.0	358.0
2.5°	366.6	364.0	365.7	361.5	352.9	348.6	350.3	350.3	348.6
5°	376.8	373.4	372.6	364.0	350.3	340.9	340.1	336.7	335.8
7.5°	385.4	381.1	376.8	363.2	345.2	331.5	327.3	322.1	320.4
10°	392.2	386.2	378.5	360.6	338.4	321.3	314.5	308.5	306.8
12.5°	395.6	388.8	378.5	355.5	329.0	310.2	301.6	293.9	292.2
15°	396.5	388.8	375.1	348.6	318.7	298.2	288.0	280.3	279.4
17.5°	393.9	385.4	370.0	339.2	308.5	286.3	276.0	269.2	266.6
20°	387.9	378.5	360.6	328.1	296.5	273.4	263.2	256.4	254.6
22.5°	380.3	370.9	351.2	317.0	283.7	260.6	252.1	246.1	243.5
25°	370.9	360.6	339.2	304.2	270.9	249.5	240.1	234.1	233.3
27.5°	358.0	346.9	325.6	289.7	258.1	237.6	229.0	224.7	223.9
30°	342.7	332.4	310.2	275.2	245.2	226.4	219.6	215.3	214.5
32.5°	325.6	316.2	294.8	261.5	233.3	216.2	209.4	205.9	205.1
35°	307.6	298.2	277.7	246.1	220.5	205.1	200.0	196.5	195.7
37.5°	289.7	280.3	260.6	231.6	208.5	194.8	189.7	187.1	186.3
40°	270.0	262.3	244.4	217.9	197.4	184.6	181.2	177.7	177.7
42.5°	251.2	244.4	228.2	204.2	186.3	176.0	171.8	169.2	169.2
45°	233.3	227.3	212.8	192.3	176.0	166.6	163.2	160.6	160.6
47.5°	215.3	210.2	197.4	178.6	165.8	156.4	151.2	151.2	152.1
50°	198.2	194.0	182.9	166.6	155.5	147.8	144.4	142.7	143.6
52.5°	183.7	178.6	169.2	155.5	145.3	138.4	135.9	134.2	135.0
55°	168.3	164.1	155.5	144.4	135.0	129.0	127.3	122.2	125.6
57.5°	151.2	149.5	142.7	133.3	125.6	119.6	117.9	116.2	116.2
60°	137.6	135.9	130.7	122.2	115.4	110.2	108.5	106.8	106.8
62.5°	125.6	123.0	118.8	111.1	105.1	100.8	99.1	97.4	97.4
65°	112.8	110.2	106.8	100.8	95.7	91.4	89.7	88.0	88.9
67.5°	100.0	98.3	95.7	89.7	85.5	82.0	79.5	78.6	78.6
70°	88.0	87.2	84.6	79.5	75.2	72.6	70.1	69.2	69.2
72.5°	76.9	76.1	73.5	69.2	65.8	63.2	60.7	59.8	60.7
75°	65.8	64.9	63.2	59.0	56.4	53.8	51.3	50.4	51.3
77.5°	54.7	54.7	52.1	49.6	46.1	44.4	41.9	41.0	41.9
80°	44.4	44.4	41.9	39.3	36.7	34.2	32.5	32.5	32.5
82.5°	34.2	32.5	31.6	29.1	27.3	25.6	23.9	23.1	23.1
85°	23.9	23.9	21.4	19.7	18.8	16.2	15.4	14.5	14.5
87.5°	14.5	14.5	12.8	11.1	10.3	7.7	6.0	6.8	6.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)