

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: P130258

Luminaire Tested: **HL612ICAT - HLM6927 - HL6WFL - 70PS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P130258  
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 - HLM6927 - 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 / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 801.0 lumens  
Efficiency: N/A  
Efficacy: 41.9 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

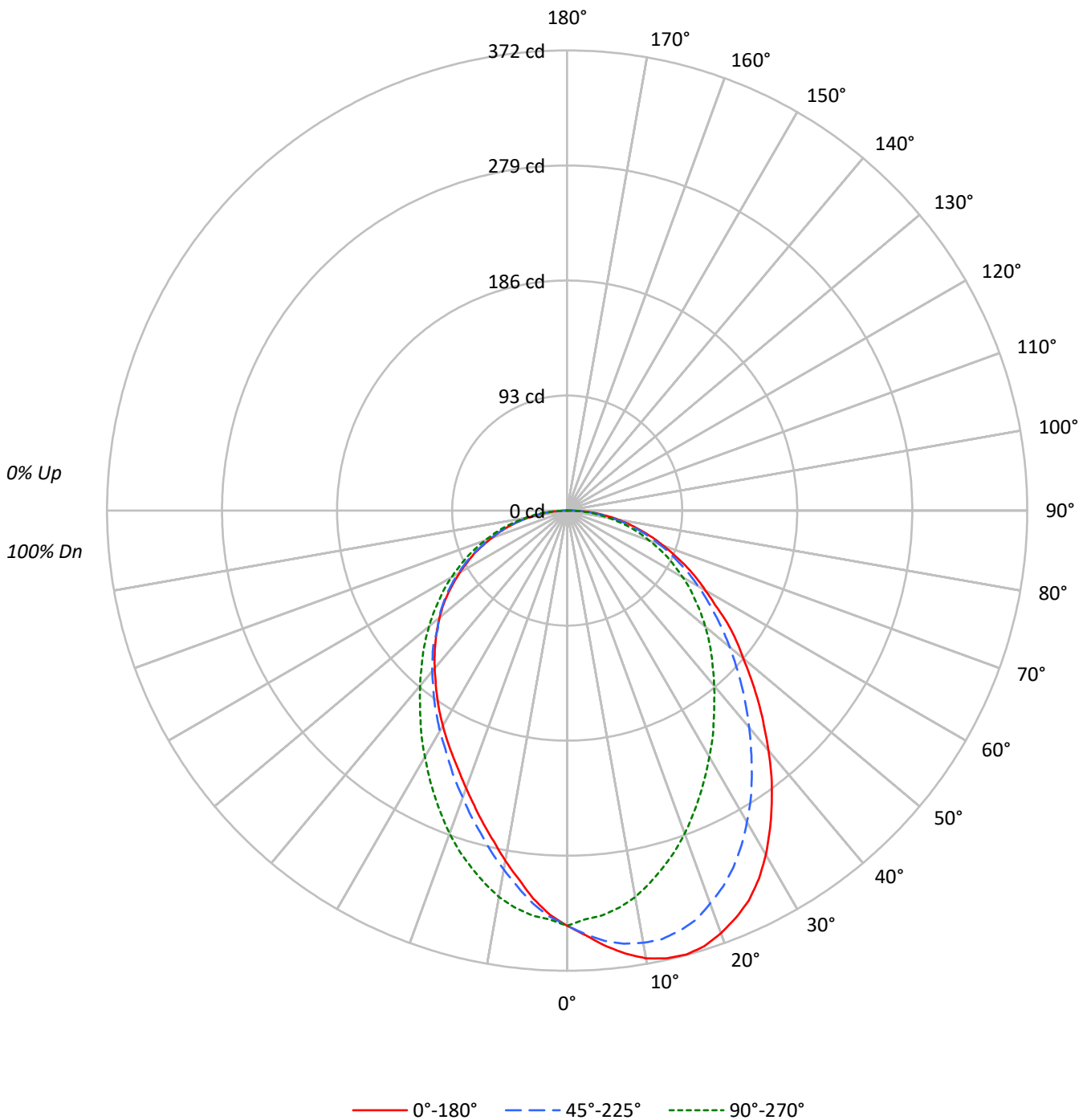
Input Watts (W): 19.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	79	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°	20032	20032	20032
5°	20682	19230	18434
10°	21284	18365	16646
15°	21437	17237	15109
20°	21060	16096	13825
25°	20369	14879	12816
30°	19194	13738	12011
35°	17713	12693	11268
40°	16126	11787	10615
45°	14586	11004	10044
50°	13104	10283	9493
55°	11904	9543	8879
60°	10546	8838	8184
65°	9510	8070	7495
70°	8322	7112	6547
75°	7145	6126	5570
80°	5704	4717	4168
85°	3800	2986	2307



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	31.4	3.9
10°-20°	86.9	10.8
20°-30°	124.0	15.5
30°-40°	139.0	17.3
40°-50°	135.1	16.9
50°-60°	118.1	14.7
60°-70°	90.9	11.3
70°-80°	56.6	7.1
80°-90°	19.1	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°	242.2	30.2
0°-40°	381.2	47.6
0°-60°	634.4	79.2
0°-90°	801.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	801.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	336	336	336	336	336	
5°	353	349	328	319	315	34
15°	372	352	299	270	262	105
25°	348	318	254	225	219	159
35°	288	260	207	187	183	180
45°	219	199	165	153	151	169
55°	158	146	126	119	118	141
65°	106	100	90	84	83	105
75°	62	59	53	48	48	65
85°	22	20	18	14	14	24
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°	335.6	335.6	335.6	335.6	335.6	335.6	335.6	335.6	335.6
2.5°	343.6	341.2	342.8	338.8	330.8	326.8	328.4	328.4	326.8
5°	353.2	350.0	349.2	341.2	328.4	319.6	318.8	315.6	314.8
7.5°	361.2	357.2	353.2	340.4	323.6	310.8	306.8	302.0	300.4
10°	367.6	362.0	354.8	338.0	317.2	301.2	294.7	289.1	287.5
12.5°	370.8	364.4	354.8	333.2	308.4	290.7	282.7	275.5	273.9
15°	371.6	364.4	351.6	326.8	298.8	279.5	269.9	262.7	261.9
17.5°	369.2	361.2	346.8	318.0	289.1	268.3	258.7	252.3	249.9
20°	363.6	354.8	338.0	307.6	277.9	256.3	246.7	240.3	238.7
22.5°	356.4	347.6	329.2	297.2	265.9	244.3	236.3	230.7	228.3
25°	347.6	338.0	318.0	285.1	253.9	233.9	225.1	219.5	218.7
27.5°	335.6	325.2	305.2	271.5	241.9	222.7	214.7	210.6	209.8
30°	321.2	311.6	290.7	257.9	229.9	212.3	205.8	201.8	201.0
32.5°	305.2	296.4	276.3	245.1	218.7	202.6	196.2	193.0	192.2
35°	288.3	279.5	260.3	230.7	206.6	192.2	187.4	184.2	183.4
37.5°	271.5	262.7	244.3	217.1	195.4	182.6	177.8	175.4	174.6
40°	253.1	245.9	229.1	204.2	185.0	173.0	169.8	166.6	166.6
42.5°	235.5	229.1	213.9	191.4	174.6	165.0	161.0	158.6	158.6
45°	218.7	213.1	199.4	180.2	165.0	156.2	153.0	150.6	150.6
47.5°	201.8	197.0	185.0	167.4	155.4	146.6	141.8	141.8	142.6
50°	185.8	181.8	171.4	156.2	145.8	138.6	135.4	133.8	134.6
52.5°	172.2	167.4	158.6	145.8	136.2	129.8	127.4	125.7	126.5
55°	157.8	153.8	145.8	135.4	126.5	120.9	119.3	114.5	117.7
57.5°	141.8	140.2	133.8	124.9	117.7	112.1	110.5	108.9	108.9
60°	129.0	127.4	122.5	114.5	108.1	103.3	101.7	100.1	100.1
62.5°	117.7	115.3	111.3	104.1	98.5	94.5	92.9	91.3	91.3
65°	105.7	103.3	100.1	94.5	89.7	85.7	84.1	82.5	83.3
67.5°	93.7	92.1	89.7	84.1	80.1	76.9	74.5	73.7	73.7
70°	82.5	81.7	79.3	74.5	70.5	68.1	65.7	64.9	64.9
72.5°	72.1	71.3	68.9	64.9	61.7	59.3	56.9	56.1	56.9
75°	61.7	60.9	59.3	55.3	52.9	50.5	48.1	47.3	48.1
77.5°	51.3	51.3	48.9	46.5	43.3	41.6	39.2	38.4	39.2
80°	41.6	41.6	39.2	36.8	34.4	32.0	30.4	30.4	30.4
82.5°	32.0	30.4	29.6	27.2	25.6	24.0	22.4	21.6	21.6
85°	22.4	22.4	20.0	18.4	17.6	15.2	14.4	13.6	13.6
87.5°	13.6	13.6	12.0	10.4	9.6	7.2	5.6	6.4	5.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)