

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: HALO

Report Number: P645627

Luminaire Tested: LCR615WW9FSE020-17W-5000K

Issue Date: 3/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P645627
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-759-65)
Test Lab: INNOVATION CENTER
Issue Date: 3/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: LCR615WW9FSE020-17W-5000K
Description: LCR 6 Wall Wash
Light Source: 5000K CCT, 93 CRI LEDS
Ballast/Driver: -

Summary

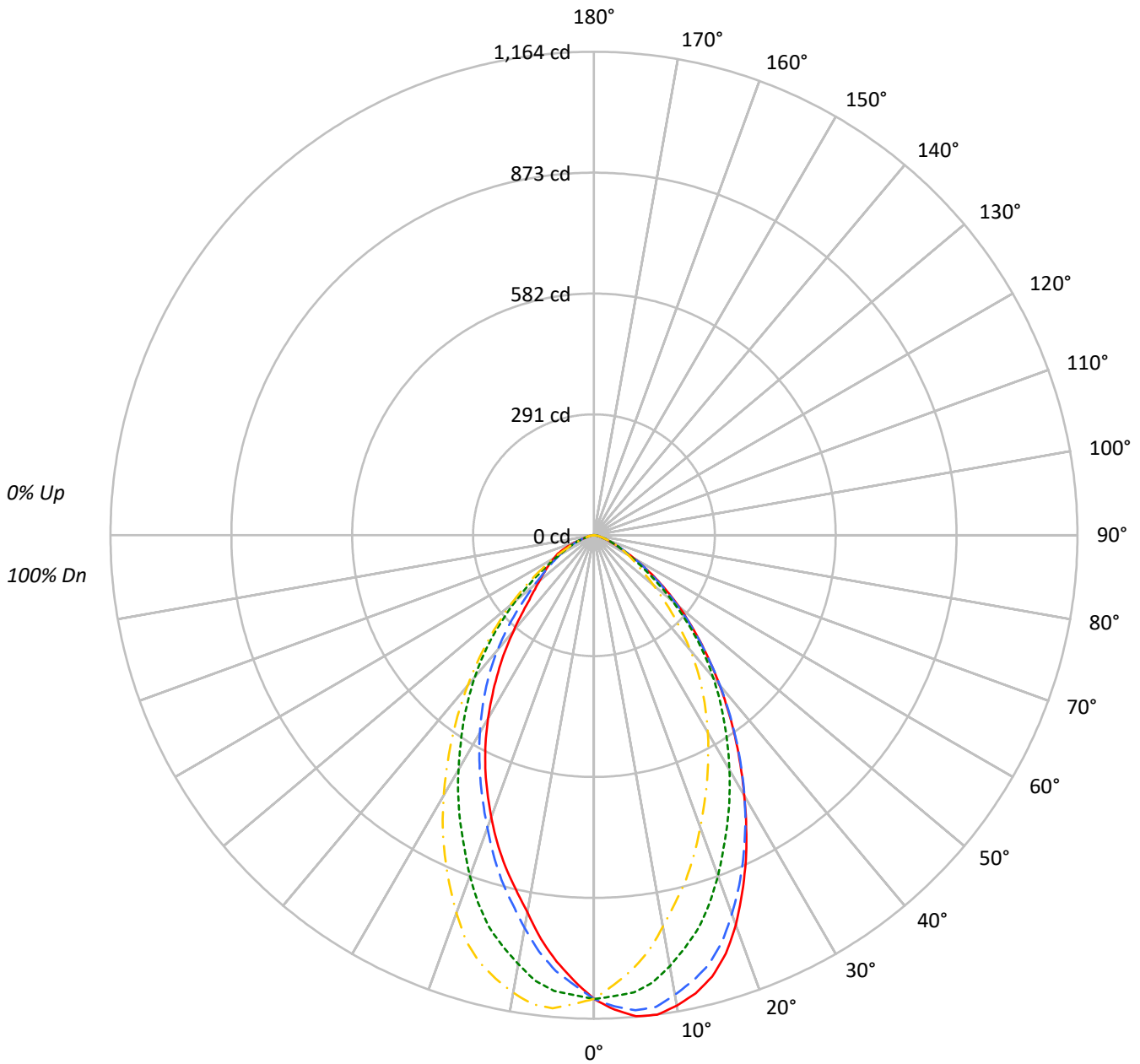
Lumens per Lamp: N/A
Luminaire Lumens: 1525.0 lumens
Efficiency: N/A
Efficacy: 91.3 lumens/watt
Spacing Criteria (0/90/45): 0.92 / 0.94 / 1.01
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 16.7
Input Voltage (V): 120
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: 24 FT



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Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - · - 90°-270° - - - 135°-315°



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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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	100	
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	92	90	
2	104	98	93	88	102	96	91	87	93	89	86	90	86	84	87	84	82	82	80	
3	97	89	83	78	95	87	82	77	85	80	76	82	78	74	80	76	73	73	71	
4	91	81	74	69	89	80	73	68	78	72	67	75	71	67	73	69	66	66	64	
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	59	59	58	
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	54	52	
7	74	63	56	50	73	62	55	50	61	55	50	60	54	50	58	53	49	49	48	
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	45	44	
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	42	40	
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	39	37	

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	61201	61201	61201	61201
5°	63966	60802	56686	60593
10°	64016	58622	51307	58355
15°	62435	55466	46811	55415
20°	58245	50918	42132	50918
25°	52328	46061	37417	46061
30°	45836	41285	32296	41285
35°	39605	36520	26896	36587
40°	33634	31917	21555	31917
45°	27956	26840	17025	26770
50°	22737	21023	14558	20937
55°	17414	15397	13199	15311
60°	12302	10931	12203	10832
65°	8081	8211	10702	8211
70°	5530	6155	6459	6155
75°	3664	4067	3855	4067
80°	3346	3631	3631	3631
85°	3019	3019	3019	3019

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 28259 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.1	6.8
10°-20°	269.5	17.7
20°-30°	343.7	22.5
30°-40°	326.3	21.4
40°-50°	244.0	16.0
50°-60°	143.5	9.4
60°-70°	67.4	4.4
70°-80°	22.1	1.5
80°-90°	5.5	0.4
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°	716.3	47.0
0°-40°	1042.6	68.4
0°-60°	1430.1	93.8
0°-90°	1525.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1525.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1116	1116	1116	1116	1116	
5°	1162	1105	1030	1101	1162	110
15°	1100	977	825	976	1100	307
25°	865	762	619	762	865	396
35°	592	546	402	547	592	370
45°	361	346	220	345	361	279
55°	182	161	138	160	182	164
65°	62	63	82	63	62	66
75°	17	19	18	19	17	21
85°	5	5	5	5	5	5
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°	202.5°	225°
0°	1116.4	1116.4	1116.4	1116.4	1116.4	1116.4	1116.4	1116.4	1116.4	1116.4	1116.4
2.5°	1143.3	1141.3	1135.6	1124.1	1110.6	1097.2	1083.8	1074.2	1074.2	1075.2	1083.8
5°	1162.4	1159.6	1148.0	1129.8	1104.9	1076.1	1050.2	1035.8	1030.1	1035.8	1053.1
7.5°	1164.4	1159.6	1145.2	1120.2	1085.7	1044.5	1009.9	986.9	980.2	988.8	1010.9
10°	1150.0	1143.3	1123.1	1092.4	1053.1	1000.3	956.2	930.3	921.7	931.3	960.1
12.5°	1129.8	1122.2	1099.1	1064.6	1015.7	955.3	905.4	878.5	871.8	879.5	908.3
15°	1100.1	1092.4	1069.4	1029.1	977.3	908.3	857.4	831.5	824.8	831.5	859.4
17.5°	1056.0	1048.3	1026.2	981.2	927.5	855.5	803.7	779.8	775.0	781.7	805.6
20°	998.4	993.6	970.6	926.5	872.8	799.9	748.1	727.0	722.2	728.0	750.0
22.5°	932.2	931.3	913.1	872.8	815.2	744.3	695.4	674.2	670.4	675.2	697.3
25°	865.1	866.1	851.7	810.4	761.5	691.5	645.5	624.4	618.6	624.4	647.4
27.5°	794.1	798.9	789.3	757.7	706.9	641.6	595.6	573.5	564.9	572.6	597.5
30°	724.1	729.9	725.1	697.3	652.2	591.8	548.6	522.7	510.2	521.8	549.6
32.5°	656.0	661.8	658.9	637.8	598.5	541.9	500.7	470.0	454.6	470.0	501.6
35°	591.8	596.6	594.6	580.3	545.7	494.9	454.6	419.1	401.9	419.1	454.6
37.5°	529.4	535.2	532.3	523.7	495.9	448.9	408.6	370.2	352.0	370.2	409.5
40°	470.0	469.0	471.9	467.1	446.0	401.9	360.6	320.3	301.2	321.3	361.6
42.5°	413.4	418.2	413.4	412.4	397.1	353.9	311.7	273.3	257.0	274.3	313.6
45°	360.6	364.5	358.7	358.7	346.2	306.0	266.6	232.1	219.6	233.1	266.6
47.5°	311.7	309.8	308.8	307.9	295.4	259.9	222.5	197.6	192.8	198.5	223.5
50°	266.6	263.8	261.8	259.0	246.5	214.8	187.0	171.7	170.7	172.6	187.0
52.5°	222.5	219.6	216.8	212.0	200.5	177.4	157.3	150.6	154.4	151.5	157.3
55°	182.2	180.3	177.4	171.7	161.1	143.9	132.4	134.3	138.1	133.3	133.3
57.5°	144.8	146.7	142.9	137.2	126.6	117.0	112.2	118.9	125.6	118.0	113.2
60°	112.2	114.1	112.2	107.4	99.7	95.9	95.0	103.6	111.3	103.6	95.9
62.5°	83.4	86.3	85.4	82.5	78.6	78.6	78.6	89.2	99.7	89.2	79.6
65°	62.3	64.3	65.2	64.3	63.3	64.3	64.3	73.9	82.5	73.9	63.3
67.5°	47.0	48.0	48.9	49.9	49.9	50.8	49.9	57.5	62.3	56.6	50.8
70°	34.5	35.5	36.4	37.4	38.4	39.3	38.4	40.3	40.3	40.3	38.4
72.5°	24.9	24.9	24.9	26.9	27.8	27.8	26.9	27.8	26.9	27.8	27.8
75°	17.3	17.3	17.3	18.2	19.2	18.2	18.2	18.2	18.2	18.2	19.2
77.5°	13.4	13.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
80°	10.6	10.6	10.6	11.5	11.5	10.6	10.6	11.5	11.5	11.5	11.5
82.5°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
85°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
87.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1116.4	1116.4	1116.4	1116.4	1116.4	1116.4
2.5°	1096.3	1107.8	1119.3	1129.8	1139.4	1143.3
5°	1075.2	1101.1	1126.0	1143.3	1155.7	1162.4
7.5°	1046.4	1081.9	1114.5	1138.5	1155.7	1164.4
10°	1001.3	1048.3	1087.6	1118.3	1137.5	1150.0
12.5°	957.2	1013.8	1058.9	1093.4	1117.4	1129.8
15°	911.1	976.4	1028.2	1064.6	1088.6	1100.1
17.5°	859.4	927.5	981.2	1023.4	1046.4	1056.0
20°	802.8	872.8	927.5	967.7	990.8	998.4
22.5°	749.1	815.2	868.0	909.2	929.4	932.2
25°	695.4	761.5	809.5	849.8	866.1	865.1
27.5°	645.5	707.8	751.9	788.4	798.9	794.1
30°	593.7	652.2	691.5	723.2	729.9	724.1
32.5°	539.0	597.5	633.0	657.9	660.8	656.0
35°	492.0	546.7	575.5	594.6	596.6	591.8
37.5°	447.9	495.9	518.9	533.3	534.2	529.4
40°	399.9	446.0	464.2	473.8	474.8	470.0
42.5°	352.0	396.1	410.5	416.3	417.2	413.4
45°	304.0	345.3	356.8	360.6	363.5	360.6
47.5°	258.0	293.5	306.0	310.7	313.6	311.7
50°	212.9	245.5	257.0	264.7	267.6	266.6
52.5°	175.5	199.5	210.0	218.7	223.5	222.5
55°	142.9	160.2	170.7	179.4	184.1	182.2
57.5°	116.1	126.6	136.2	143.9	146.7	144.8
60°	95.0	98.8	106.5	114.1	114.1	112.2
62.5°	77.7	78.6	82.5	87.3	86.3	83.4
65°	63.3	63.3	64.3	66.2	64.3	62.3
67.5°	50.8	50.8	49.9	49.9	47.0	47.0
70°	40.3	38.4	38.4	37.4	34.5	34.5
72.5°	28.8	27.8	26.9	25.9	24.9	24.9
75°	19.2	19.2	18.2	18.2	17.3	17.3
77.5°	15.3	15.3	15.3	14.4	14.4	13.4
80°	11.5	11.5	11.5	11.5	10.6	10.6
82.5°	8.6	7.7	7.7	7.7	7.7	7.7
85°	4.8	4.8	4.8	4.8	4.8	4.8
87.5°	1.9	1.9	1.9	1.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)