

Scaled data based on original data using  
LM-46-04 Photometric Testing of Indoor Luminaires Using High Intensity Discharge or  
Incandescent Filament Lamps (Reaffirmed 2012)

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: E395645

Luminaire Tested: **H-2570-P**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-46-04  
Report Number: E395645  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: H-2570-P  
Description: HALO QUARTER SPHERE  
Light Source: Q250 T4 4850 LUMENS  
Ballast/Driver: -

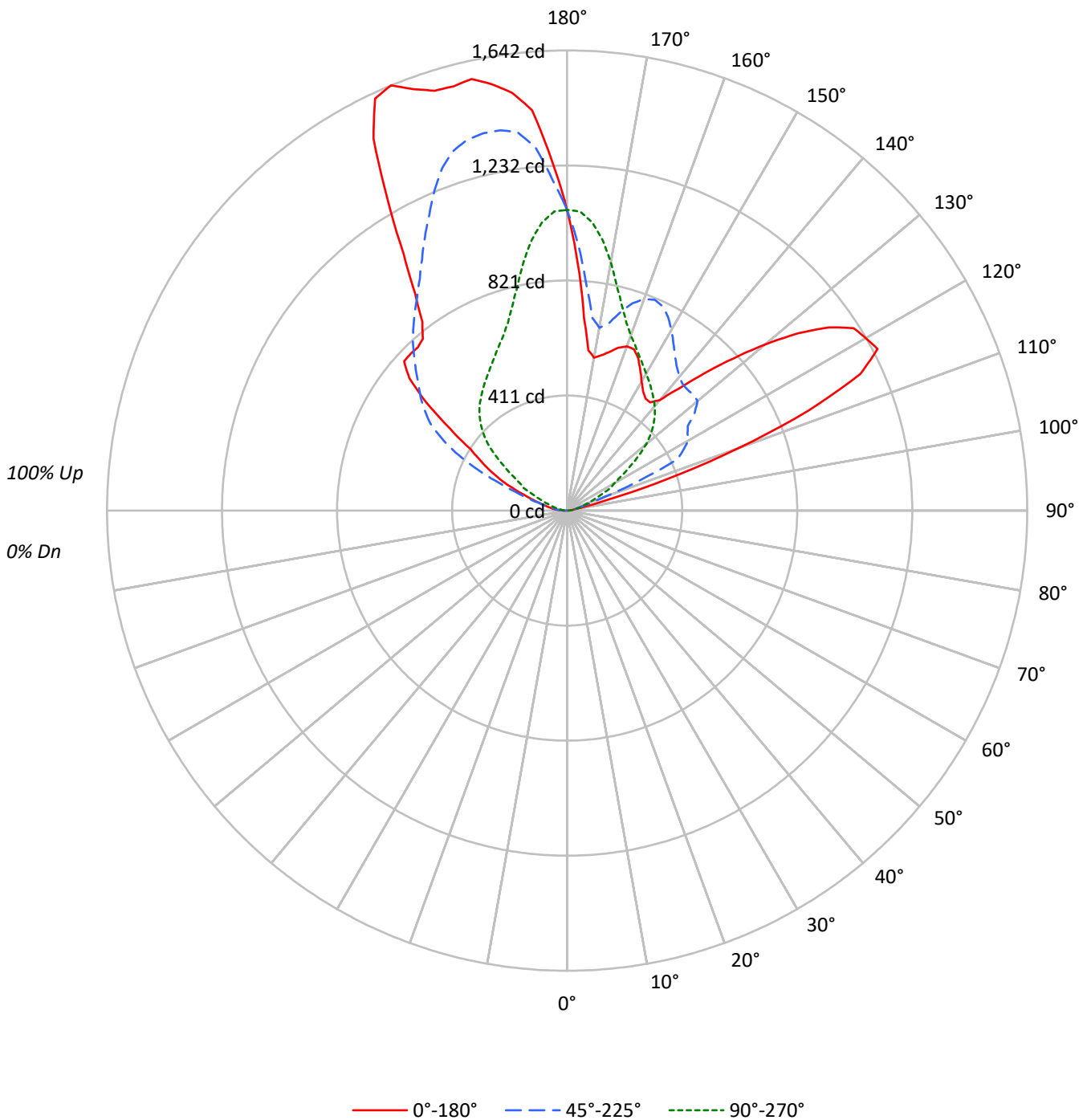
**Summary**

Lumens per Lamp: 4850 (1 lamp)  
Luminaire Lumens: 2949.1 lumens  
Efficiency: 60.8%  
Efficacy: 11.8 lumens/watt  
N/A  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
CIE Type: Indirect

Input Watts (W): 250  
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	58	58	58	58	49	49	49	49	34	34	34	19	19	19	6	6	6	0
1	53	50	48	46	45	43	41	40	29	28	27	17	16	16	5	5	5	0
2	48	44	40	38	41	38	35	32	26	24	23	15	14	13	5	5	4	0
3	44	38	34	31	37	33	30	27	23	21	19	13	12	11	4	4	4	0
4	40	34	29	26	34	29	25	23	20	18	16	12	10	9	4	3	3	0
5	36	30	25	22	31	26	22	19	18	15	14	10	9	8	3	3	3	0
6	33	27	22	19	28	23	19	16	16	13	12	9	8	7	3	3	2	0
7	31	24	19	16	26	21	17	14	14	12	10	8	7	6	3	2	2	0
8	28	21	17	14	24	18	15	12	13	10	9	7	6	5	2	2	2	0
9	26	19	15	12	22	17	13	11	12	9	8	7	5	5	2	2	2	0
10	24	18	14	11	21	15	12	10	11	8	7	6	5	4	2	2	1	0

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
95°	1371	1704	5064
100°	1723	1655	3899
105°	6101	2084	4109
110°	20463	2565	5120
115°	29407	3367	6739
120°	26494	4153	7698
125°	21395	5144	9614
130°	15431	6157	12315
135°	10529	6646	12030
140°	7229	6832	11255
145°	6407	6903	12415
150°	6605	7009	15912
155°	7119	7236	19265
160°	7140	7615	18324
165°	6534	8420	17464
170°	6058	9814	16884
175°	7461	11144	15492



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	0.0	0.0	0.0
10°-20°	0.0	0.0	0.0
20°-30°	0.0	0.0	0.0
30°-40°	0.0	0.0	0.0
40°-50°	0.0	0.0	0.0
50°-60°	0.0	0.0	0.0
60°-70°	0.0	0.0	0.0
70°-80°	0.0	0.0	0.0
80°-90°	0.0	0.0	0.0
90°-100°	21.8	0.7	0.5
100°-110°	110.6	3.8	2.3
110°-120°	444.3	15.1	9.2
120°-130°	561.3	19.0	11.6
130°-140°	525.3	17.8	10.8
140°-150°	480.4	16.3	9.9
150°-160°	427.3	14.5	8.8
160°-170°	279.9	9.5	5.8
170°-180°	98.2	3.3	2.0
0°-30°	0.0	0.0	0.0
0°-40°	0.0	0.0	0.0
0°-60°	0.0	0.0	0.0
0°-90°	0.0	0.0	0.0
90°-120°	576.7	19.6	11.9
90°-150°	2143.7	72.7	44.2
90°-180°	2949.0	100.0	60.8
0°-180°	2949.1	100.0	60.8

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
90°	1	1	2	4	4	
95°	11	9	14	32	41	12
105°	147	47	50	103	99	239
115°	1155	435	132	364	265	1058
125°	1140	525	274	620	512	1005
135°	692	609	437	771	790	547
145°	488	671	525	933	945	314
155°	599	805	609	1165	1622	272
165°	586	732	756	1370	1567	168
175°	690	800	1031	1302	1434	62
180°	1073	1073	1073	1073	1073	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
90°	1.0	1.0	1.3	1.7	1.9	2.8	3.7	6.1	4.1
92.5°	2.0	2.5	2.8	5.4	9.0	15.0	20.5	25.1	23.8
95°	11.1	10.2	8.7	9.5	13.8	21.5	32.2	40.7	41.0
97.5°	16.6	14.9	13.0	13.2	18.9	36.7	42.1	49.9	51.7
100°	27.8	26.2	18.9	18.2	26.7	51.7	54.9	62.7	62.9
102.5°	55.5	47.9	34.5	26.8	40.9	71.9	73.8	83.6	78.2
105°	146.7	110.2	47.0	37.8	50.1	97.3	102.6	116.8	98.8
107.5°	372.2	223.3	81.2	64.1	64.1	137.0	149.1	173.2	127.6
110°	650.2	471.9	140.9	169.2	81.5	164.6	196.5	254.6	162.7
112.5°	933.8	738.2	274.1	338.0	104.7	242.8	276.8	363.8	212.0
115°	1154.6	936.7	434.7	485.4	132.2	322.8	364.3	482.0	264.6
117.5°	1248.8	1039.7	466.9	477.1	175.4	414.8	448.6	551.5	311.6
120°	1230.7	1074.5	498.3	471.9	192.9	488.8	518.6	597.5	357.6
122.5°	1211.8	1059.3	509.5	494.8	229.8	544.9	579.0	619.4	409.2
125°	1140.1	1009.1	525.2	532.6	274.1	598.6	619.6	636.7	512.3
127.5°	1038.4	929.1	573.4	591.4	321.7	628.4	657.8	661.4	633.4
130°	921.5	833.2	607.0	624.4	367.7	666.4	691.0	705.7	735.4
132.5°	802.6	723.6	611.5	642.2	405.2	696.1	730.3	760.0	789.2
135°	691.7	643.9	608.7	650.7	436.6	741.5	771.2	823.9	790.3
137.5°	590.8	569.5	610.8	652.6	463.1	776.3	814.4	899.6	789.2
140°	514.5	521.3	622.7	653.0	486.2	807.7	854.2	991.0	801.0
142.5°	486.1	510.6	643.5	658.6	505.6	835.1	892.3	1102.5	848.6
145°	487.6	525.2	670.9	665.9	525.3	853.1	932.7	1205.6	944.8
147.5°	504.4	561.7	706.2	672.6	544.7	874.4	979.2	1315.7	1085.5
150°	531.4	612.7	743.9	679.9	563.9	894.0	1035.8	1386.7	1280.2
152.5°	565.0	660.3	779.1	687.2	585.2	918.1	1099.7	1425.4	1496.5
155°	599.4	713.7	805.0	684.4	609.3	959.6	1164.6	1436.6	1622.1
157.5°	623.3	741.0	814.4	677.0	635.6	996.0	1236.5	1442.7	1642.3
160°	623.3	739.3	802.6	669.8	664.8	1039.7	1302.6	1462.3	1599.7
162.5°	609.8	709.0	775.3	668.8	702.9	1075.6	1346.9	1495.5	1570.5
165°	586.3	664.8	732.0	676.0	755.6	1114.8	1370.5	1526.2	1567.2
167.5°	567.7	632.2	683.6	693.9	819.5	1154.6	1379.4	1524.0	1577.2
170°	554.3	588.5	662.0	734.3	897.9	1187.1	1377.7	1496.0	1544.7
172.5°	577.3	603.1	692.8	802.6	973.0	1198.7	1362.0	1459.3	1503.3
175°	690.5	715.8	800.4	894.6	1031.4	1182.1	1301.5	1394.9	1433.8
177.5°	881.1	900.5	943.9	998.8	1067.8	1137.3	1180.4	1240.5	1249.9
180°	1073.0	1073.0	1073.0	1073.0	1073.0	1073.0	1073.0	1073.0	1073.0

(END OF REPORT)