

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: E395643

Luminaire Tested: **H-2577-P (UPPER HEMISPHERE)**

Issue Date: 3/3/2020



Test Information

Test Method: LM-46-04
Report Number: E395643
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H-2577-P (UPPER HEMISPHERE)
Description: HALO CASCADE II
Light Source: PL13 900 LUMENS
Ballast/Driver: -

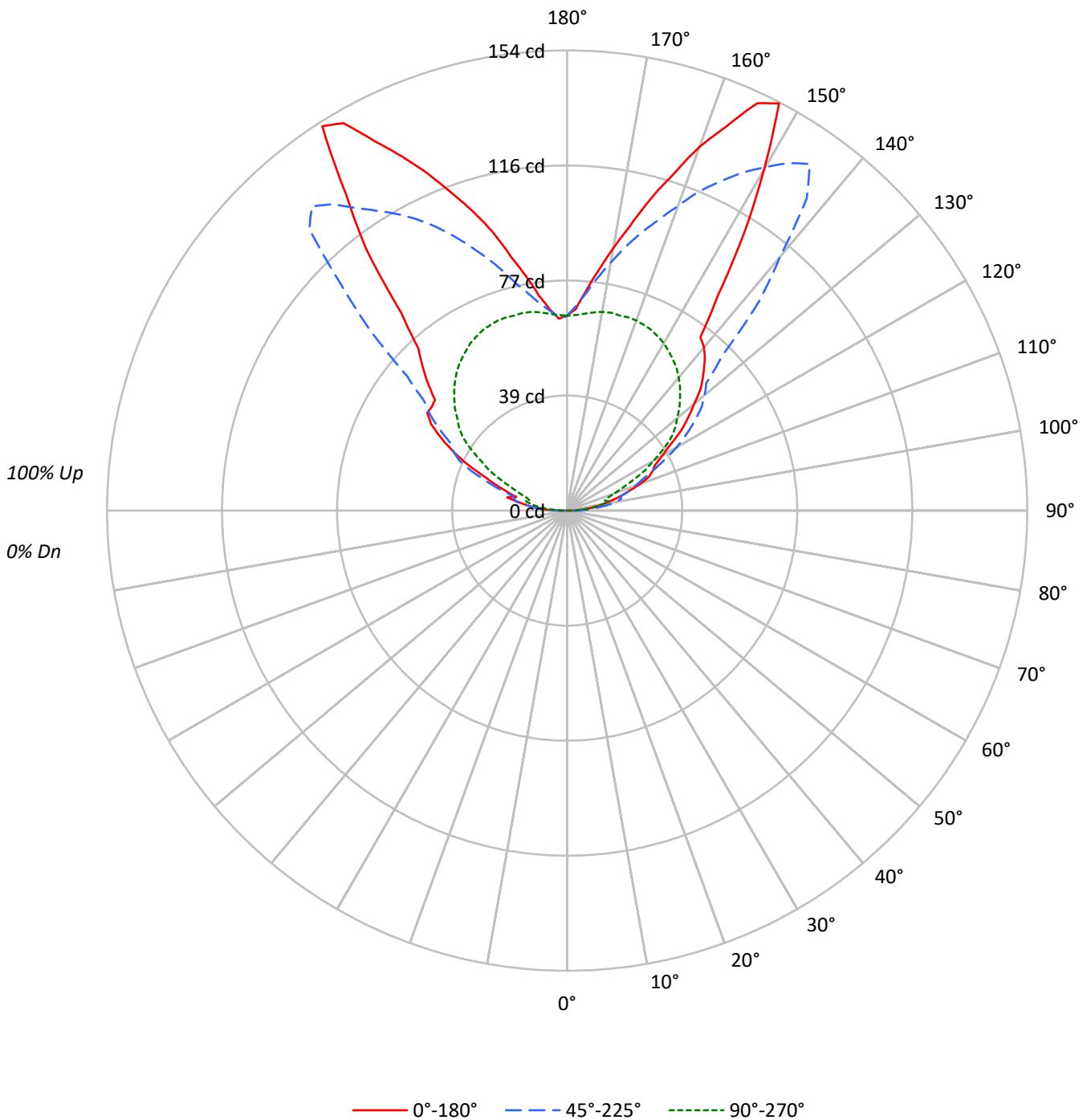
Summary

Lumens per Lamp: 900 (1 lamp)
Luminaire Lumens: 322.3 lumens
Efficiency: 35.8%
Efficacy: 24.8 lumens/watt
N/A
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Indirect

Input Watts (W): 13
Input Voltage (V): NR
Input Current (A_{in}): 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			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	34	34	34	34	29	29	29	29	20	20	20	11	11	11	4	4	4	0
1	31	30	28	27	26	25	24	23	17	17	16	10	10	9	3	3	3	0
2	28	26	24	22	24	22	20	19	15	14	13	9	8	8	3	3	3	0
3	26	23	20	18	22	19	17	16	13	12	11	8	7	7	2	2	2	0
4	23	20	17	15	20	17	15	13	12	10	9	7	6	6	2	2	2	0
5	21	18	15	13	18	15	13	11	10	9	8	6	5	5	2	2	2	0
6	20	16	13	11	17	13	11	10	9	8	7	5	5	4	2	2	1	0
7	18	14	11	10	15	12	10	8	8	7	6	5	4	4	2	1	1	0
8	17	13	10	8	14	11	9	7	8	6	5	4	4	3	1	1	1	0
9	15	11	9	7	13	10	8	6	7	5	5	4	3	3	1	1	1	0
10	14	10	8	6	12	9	7	6	6	5	4	4	3	2	1	1	1	0

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
95°	803	889	1260
100°	738	750	1035
105°	761	541	732
110°	815	532	803
115°	805	627	942
120°	790	717	1051
125°	873	798	1072
130°	929	804	966
135°	980	813	1043
140°	1002	816	1213
145°	1158	811	1694
150°	1638	804	1861
155°	1786	792	1552
160°	1485	775	1296
165°	1204	753	1076
170°	974	738	871
175°	800	714	732



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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°	10.1	3.1	1.1
100°-110°	20.0	6.2	2.2
110°-120°	32.8	10.2	3.6
120°-130°	49.8	15.5	5.5
130°-140°	60.4	18.7	6.7
140°-150°	66.7	20.7	7.4
150°-160°	50.4	15.6	5.6
160°-170°	25.2	7.8	2.8
170°-180°	6.9	2.1	0.8
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°	62.9	19.5	7.0
90°-150°	239.8	74.4	26.6
90°-180°	322.0	99.9	35.8
0°-180°	322.3	100.0	35.8

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
90°	3	4	1	2	1	
95°	6	10	7	10	10	7
105°	18	19	13	19	18	19
115°	32	32	25	40	37	31
125°	46	52	42	56	57	41
135°	64	74	53	107	68	50
145°	88	142	62	124	129	58
155°	150	122	67	105	131	67
165°	108	96	68	83	97	31
175°	74	73	66	67	68	8
180°	65	65	65	65	65	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
90°	2.8	4.5	4.4	2.8	1.2	2.1	1.9	1.3	1.3
92.5°	4.0	6.7	6.7	5.4	3.5	7.1	6.9	7.2	6.5
95°	6.5	10.0	9.6	8.3	7.2	10.0	10.3	11.0	10.2
97.5°	8.8	13.4	13.3	11.2	9.6	13.0	13.8	14.5	13.3
100°	11.9	16.8	16.6	14.4	12.1	16.1	17.4	17.8	16.7
102.5°	14.9	20.6	18.5	17.2	14.1	16.6	18.0	19.6	20.6
105°	18.3	18.5	18.6	16.6	13.0	19.2	18.9	18.0	17.6
107.5°	21.6	22.6	21.8	19.1	14.1	19.3	23.5	22.0	21.3
110°	25.9	26.8	24.3	22.3	16.9	22.3	28.7	26.6	25.5
112.5°	29.6	30.1	27.3	23.1	20.2	26.1	34.7	32.1	30.2
115°	31.6	31.6	31.7	26.4	24.6	33.9	39.9	38.5	37.0
117.5°	33.2	34.1	36.6	31.0	29.6	46.5	42.9	44.9	43.1
120°	36.7	39.0	42.3	41.4	33.3	59.9	44.9	50.8	48.8
122.5°	40.7	44.4	47.2	54.0	38.1	69.7	50.6	54.5	54.0
125°	46.5	49.7	52.0	68.2	42.5	75.8	56.0	55.4	57.1
127.5°	51.0	54.8	56.6	80.7	45.6	79.7	60.4	55.6	57.1
130°	55.5	59.9	60.1	86.1	48.0	82.5	69.9	61.6	57.7
132.5°	60.7	63.9	63.1	89.8	51.0	84.4	89.6	67.1	63.3
135°	64.4	68.3	73.5	92.3	53.4	85.8	106.9	71.6	68.5
137.5°	68.2	71.2	95.1	94.2	55.9	86.9	127.7	81.6	73.7
140°	71.3	73.7	110.8	95.7	58.1	87.6	132.9	104.1	86.3
142.5°	73.2	85.3	131.7	95.6	60.1	87.3	129.2	123.2	110.6
145°	88.1	107.7	141.6	95.0	61.7	86.3	123.6	147.6	128.9
147.5°	110.3	125.5	137.9	94.2	63.2	85.5	119.0	148.5	152.5
150°	131.8	150.4	132.7	92.6	64.7	84.1	114.7	140.4	149.7
152.5°	153.6	152.8	127.6	91.2	65.7	82.4	110.1	132.0	139.3
155°	150.4	144.6	121.6	89.5	66.7	80.5	105.0	123.9	130.7
157.5°	139.0	135.7	115.7	87.4	67.2	78.5	99.5	116.8	122.1
160°	129.6	126.1	108.5	85.1	67.7	76.5	93.9	108.9	113.1
162.5°	117.9	116.5	102.0	82.6	67.8	75.3	88.4	100.8	105.0
165°	108.0	106.9	96.3	80.0	67.6	73.4	83.0	92.9	96.6
167.5°	97.7	98.0	90.4	77.2	67.8	71.9	77.5	85.0	87.1
170°	89.1	89.9	84.3	74.5	67.5	70.2	73.5	77.6	79.7
172.5°	81.3	82.6	78.7	71.5	66.9	68.3	69.8	72.4	72.6
175°	74.0	75.7	73.0	69.0	66.1	66.9	67.2	67.8	67.7
177.5°	67.6	69.4	68.5	66.3	65.5	65.9	64.4	64.7	64.3
180°	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2

(END OF REPORT)