

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 COMMERCIAL

Report Number: P580250

Luminaire Tested: **HC425D010-HM40525940-41RWWC**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580250
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-14)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC425D010-HM40525940-41RWWC
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2365.1 lumens
Efficiency: N/A
Efficacy: 88.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.15 / 1.21
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

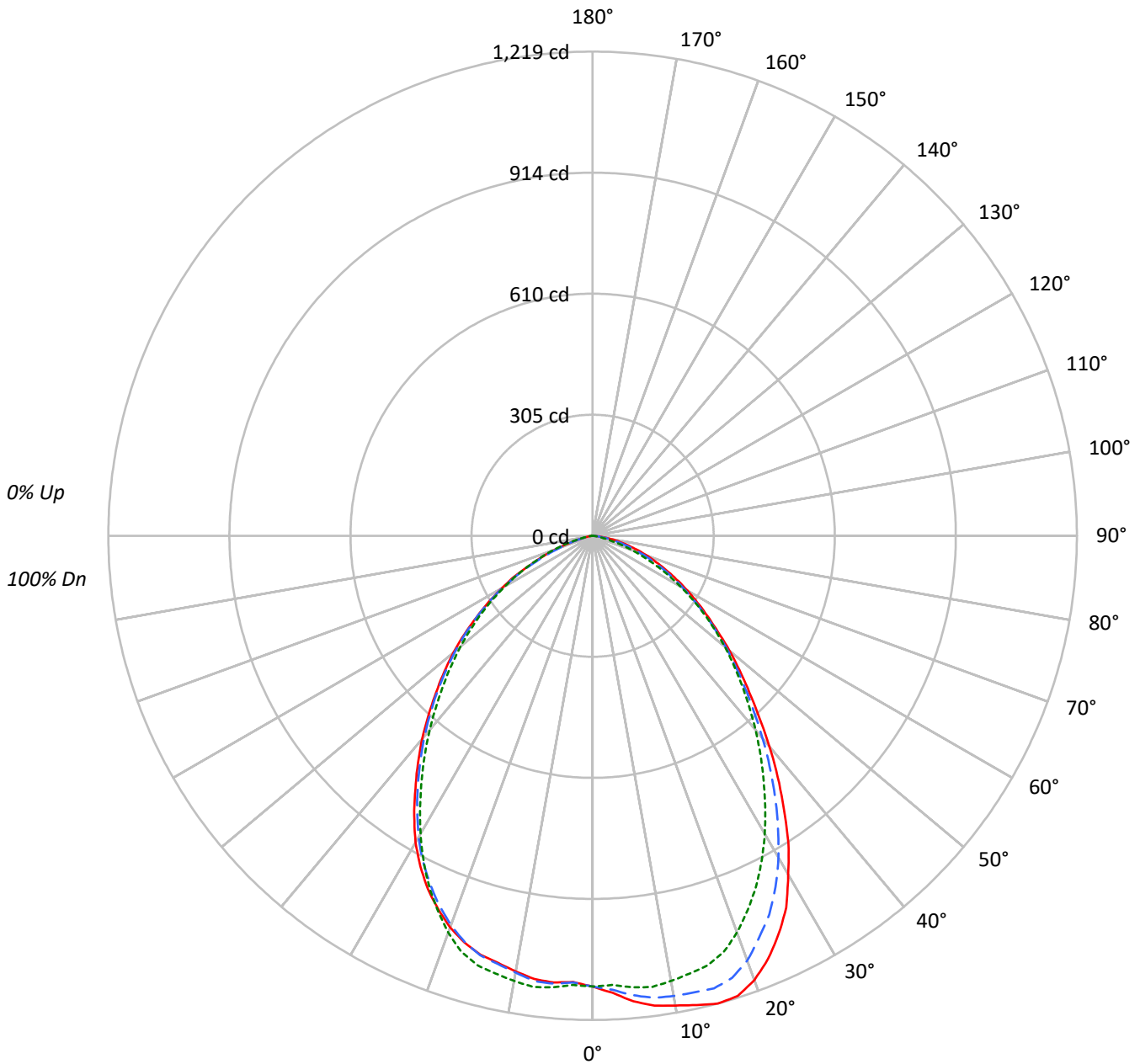
Input Watts (W): 26.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100				
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88				
2	102	95	90	85	100	94	88	84	90	86	82	87	83	80	84	81	78	76				76				
3	95	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	69	67				67				
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58				58				
5	81	70	61	56	79	68	61	55	66	60	55	65	59	54	63	58	54	52				52				
6	75	63	55	49	74	62	55	49	61	54	49	59	53	48	58	52	48	46				46				
7	70	58	50	44	69	57	49	44	56	49	44	54	48	44	53	47	43	41				41				
8	66	53	45	40	64	53	45	40	51	44	40	50	44	39	49	43	39	37				37				
9	62	49	42	36	60	49	41	36	47	41	36	46	40	36	45	40	36	34				34				
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31				31				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	139997	139997	139997
5°	145658	141287	139764
10°	150411	142533	139464
15°	155701	142969	139445
20°	156228	139505	137707
25°	150700	132545	133593
30°	140234	123413	126917
35°	126334	112933	117104
40°	111375	102728	107414
45°	97388	92556	97109
50°	86217	83300	87695
55°	75868	73546	76535
60°	67741	62808	64707
65°	59540	51046	50112
70°	52004	37615	34297
75°	43130	22637	18300
80°	32746	8737	5469
85°	15143	2264	2264



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.5	4.6
10°-20°	319.5	13.5
20°-30°	462.7	19.6
30°-40°	488.1	20.6
40°-50°	422.4	17.9
50°-60°	312.9	13.2
60°-70°	180.4	7.6
70°-80°	63.0	2.7
80°-90°	6.6	0.3
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°	891.6	37.7
0°-40°	1379.7	58.3
0°-60°	2115.1	89.4
0°-90°	2365.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2365.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1135	1135	1135	1135	1135	
5°	1176	1161	1141	1132	1129	113
15°	1219	1180	1120	1094	1092	343
25°	1107	1052	974	968	982	507
35°	839	801	750	767	778	524
45°	558	543	531	551	557	433
55°	353	345	342	354	356	318
65°	204	192	175	166	172	204
75°	90	77	48	38	38	97
85°	11	6	2	2	2	17
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°	1135.0	1135.0	1135.0	1135.0	1135.0	1135.0	1135.0	1135.0	1135.0
2.5°	1151.8	1148.8	1144.1	1138.0	1131.9	1127.3	1125.7	1124.3	1124.3
5°	1176.4	1170.2	1161.1	1148.8	1141.1	1136.5	1131.9	1128.8	1128.8
7.5°	1193.2	1187.1	1173.3	1156.4	1145.7	1136.5	1130.4	1125.7	1125.7
10°	1200.9	1193.2	1176.4	1154.9	1138.0	1125.7	1116.6	1113.5	1113.5
12.5°	1210.1	1200.9	1177.9	1150.3	1128.8	1113.5	1104.3	1101.2	1101.2
15°	1219.3	1208.6	1179.5	1147.2	1119.6	1101.2	1093.5	1092.0	1092.0
17.5°	1214.7	1200.9	1167.2	1128.8	1098.2	1079.8	1072.1	1072.1	1073.6
20°	1190.2	1176.4	1138.0	1095.1	1062.8	1049.1	1043.0	1046.0	1049.1
22.5°	1153.4	1136.5	1095.1	1053.7	1019.9	1007.6	1007.6	1012.3	1016.9
25°	1107.3	1092.0	1052.1	1006.2	973.9	964.7	967.8	975.5	981.6
27.5°	1055.2	1038.3	996.9	954.0	921.7	917.2	924.9	935.6	938.7
30°	984.6	970.8	935.6	894.2	866.5	865.0	875.8	883.4	891.1
32.5°	917.2	901.8	868.1	828.2	808.3	809.8	822.0	831.3	835.9
35°	839.0	825.2	800.6	768.4	750.0	753.0	766.8	776.1	777.7
37.5°	765.3	756.1	731.6	707.1	693.2	699.4	711.6	722.3	722.3
40°	691.7	684.1	665.7	645.7	638.0	645.7	658.0	667.1	667.1
42.5°	621.2	616.5	601.2	587.4	582.8	593.5	604.2	611.9	610.5
45°	558.3	553.7	542.9	532.2	530.6	541.4	550.6	555.2	556.7
47.5°	501.5	498.5	489.3	481.6	481.6	492.4	500.0	504.6	506.1
50°	449.3	446.3	438.6	432.5	434.1	444.8	450.9	455.6	457.0
52.5°	397.2	395.7	389.6	381.9	386.5	394.1	401.8	404.9	406.4
55°	352.8	352.8	345.1	338.9	342.0	349.7	354.3	355.9	355.9
57.5°	312.8	311.4	302.1	296.0	297.5	305.2	308.3	309.8	309.8
60°	274.6	273.0	263.8	254.6	254.6	259.2	260.7	262.3	262.3
62.5°	237.8	236.2	225.5	217.8	214.7	213.2	213.2	216.2	222.4
65°	204.0	202.4	191.7	179.4	174.9	170.3	165.6	168.7	171.7
67.5°	173.3	170.3	159.5	148.8	138.1	130.4	122.7	127.4	133.4
70°	144.2	141.1	128.8	116.5	104.3	92.0	85.9	92.0	95.1
72.5°	116.5	113.5	101.3	89.0	73.6	61.3	59.8	61.3	62.9
75°	90.5	89.0	76.7	62.9	47.5	38.4	38.4	38.4	38.4
77.5°	67.5	64.5	52.2	39.9	27.7	21.5	20.0	20.0	20.0
80°	46.1	42.9	32.2	23.0	12.3	9.3	9.3	7.7	7.7
82.5°	26.1	24.5	16.8	9.3	4.6	3.0	3.0	3.0	3.0
85°	10.7	9.3	6.1	3.0	1.6	1.6	1.6	1.6	1.6
87.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)