

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P27470

Luminaire Tested: **MAE-G-4-LD4-UNV-AMBIENT-1STD-40-WDDCPH**

Test Date: 02/08/16

Test Information

Test Method: LM-79-08
Report Number: P27470
Test Lab: INNOVATION CENTER-P2
Test Date: 02/08/16
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: MAE-G-4-LD4-UNV-AMBIENT-1STD-40-WDDCPH
Description: FAILSAFE 2X4 LED MEDICAL AMBIENT LUMINAIRE
Light Source: (84) 4000K NICHIA LEDS
2UT119028A8404A
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER
OT50W

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3163.0 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

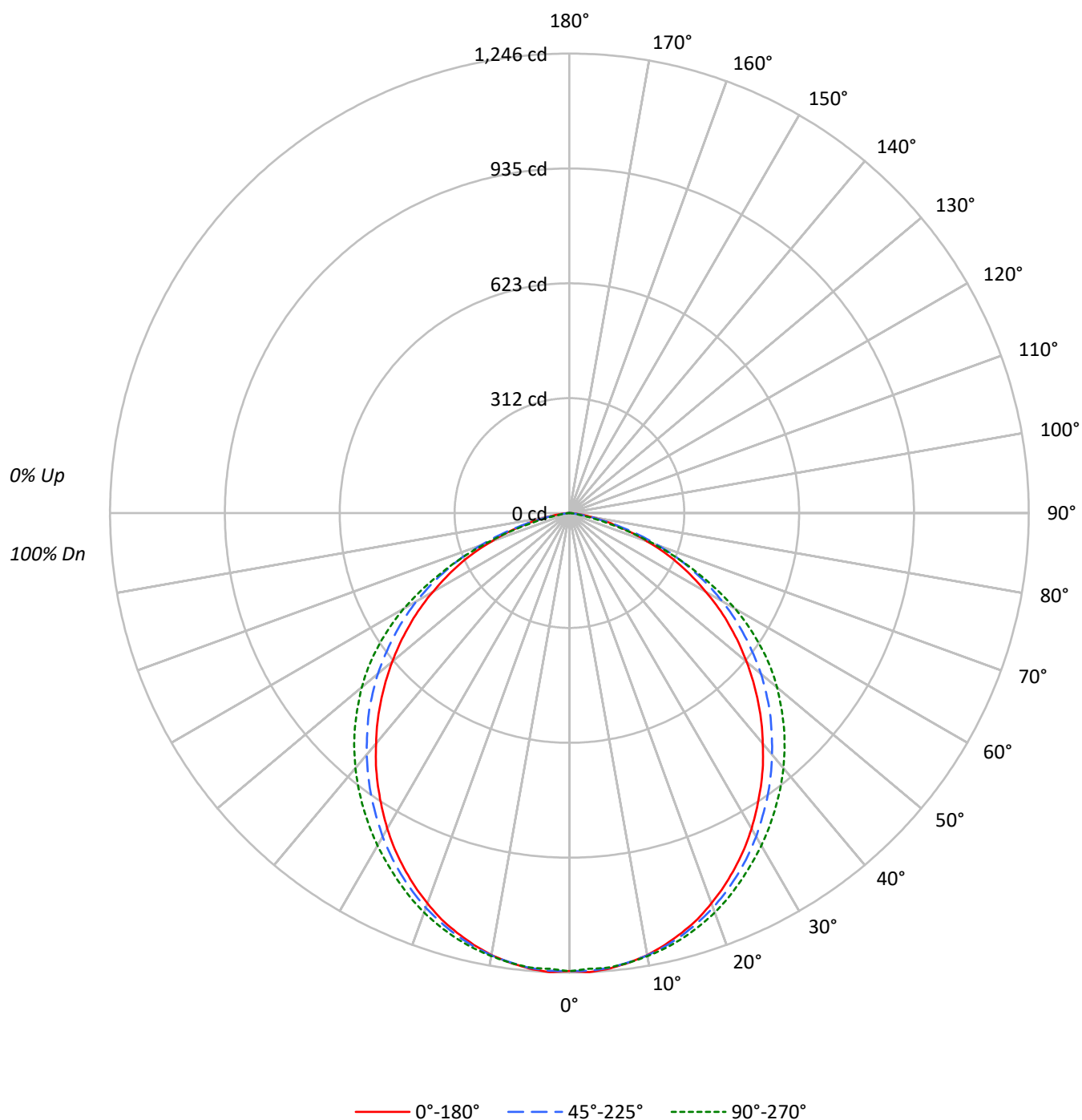
Input Watts (W): 34.1
Input Voltage (V): 120.10
Input Current (Ain): 0.28562
Voltage Rise (V): NR
Power Factor: 0.9983
Total Harmonic Distortion (THDi): 8.14%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 24 HR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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	100		
1	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86		
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73		
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62		
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53		
5	78	65	56	50	75	64	56	50	62	55	49	60	54	49	58	53	48	46		
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	42	40		
7	67	53	45	39	65	52	44	39	51	44	38	50	43	38	48	42	38	36		
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32		
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29		
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1671	1671	1671
5°	1675	1672	1671
10°	1663	1664	1667
15°	1641	1651	1662
20°	1612	1631	1651
25°	1577	1605	1633
30°	1535	1574	1617
35°	1486	1539	1601
40°	1433	1502	1586
45°	1378	1465	1566
50°	1312	1419	1539
55°	1241	1361	1490
60°	1152	1289	1397
65°	1047	1178	1216
70°	885	1003	948
75°	686	749	572
80°	457	387	217
85°	216	139	108



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.3	3.7
10°-20°	333.6	10.5
20°-30°	497.0	15.7
30°-40°	585.9	18.5
40°-50°	593.3	18.8
50°-60°	517.5	16.4
60°-70°	357.0	11.3
70°-80°	144.9	4.6
80°-90°	16.4	0.5
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°	948.0	30.0
0°-40°	1533.9	48.5
0°-60°	2644.7	83.6
0°-90°	3163.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3163.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1242	1242	1242	1242	1242	
5°	1240	1232	1238	1236	1237	118
15°	1178	1174	1185	1190	1193	332
25°	1062	1063	1081	1092	1100	489
35°	905	910	937	960	975	566
45°	724	732	770	804	823	558
55°	529	539	580	617	635	473
65°	329	340	370	380	382	324
75°	132	144	144	122	110	143
85°	14	12	9	8	7	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1242	1242	1242	1242	1242
2.5°	1246	1236	1242	1240	1237
5°	1240	1232	1238	1236	1237
7.5°	1230	1223	1229	1229	1230
10°	1217	1210	1218	1218	1220
12.5°	1199	1194	1203	1205	1208
15°	1178	1174	1185	1190	1193
17.5°	1155	1151	1163	1170	1174
20°	1126	1124	1139	1145	1153
22.5°	1096	1095	1111	1120	1128
25°	1062	1063	1081	1092	1100
27.5°	1027	1028	1048	1062	1071
30°	988	991	1013	1029	1041
32.5°	947	951	975	996	1009
35°	905	910	937	960	975
37.5°	862	867	897	924	940
40°	816	823	855	886	903
42.5°	771	778	812	846	864
45°	724	732	770	804	823
47.5°	676	684	724	761	779
50°	627	637	678	716	735
52.5°	579	589	629	669	688
55°	529	539	580	617	635
57.5°	480	490	531	565	579
60°	428	440	479	507	519
62.5°	378	390	426	448	452
65°	329	340	370	380	382
67.5°	278	289	315	317	313
70°	225	239	255	249	241
72.5°	178	191	199	183	172
75°	132	144	144	122	110
77.5°	93	101	92	71	61
80°	59	63	50	33	28
82.5°	32	33	21	16	15
85°	14	12	9	8	7
87.5°	5	4	3	3	3
90°	0	0	0	0	0

(END OF REPORT)