

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: P189191

Luminaire Tested: **MAE-G-2-LD4-UNV-EXAM-HI-40-WDDCPH**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P189191
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27478)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: MAE-G-2-LD4-UNV-EXAM-HI-40-WDDCPH
Description: FAILSAFE 2X2 LED MEDICAL EXAM LUMINAIRE
Light Source: (84) 4000K NICHIA LEDS

Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2219.2 lumens
Efficiency: N/A
Efficacy: 49.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.04 / 1.21
Luminous Opening: Circular (Dia: 1.12' x H: 0')
CIE Type: Direct

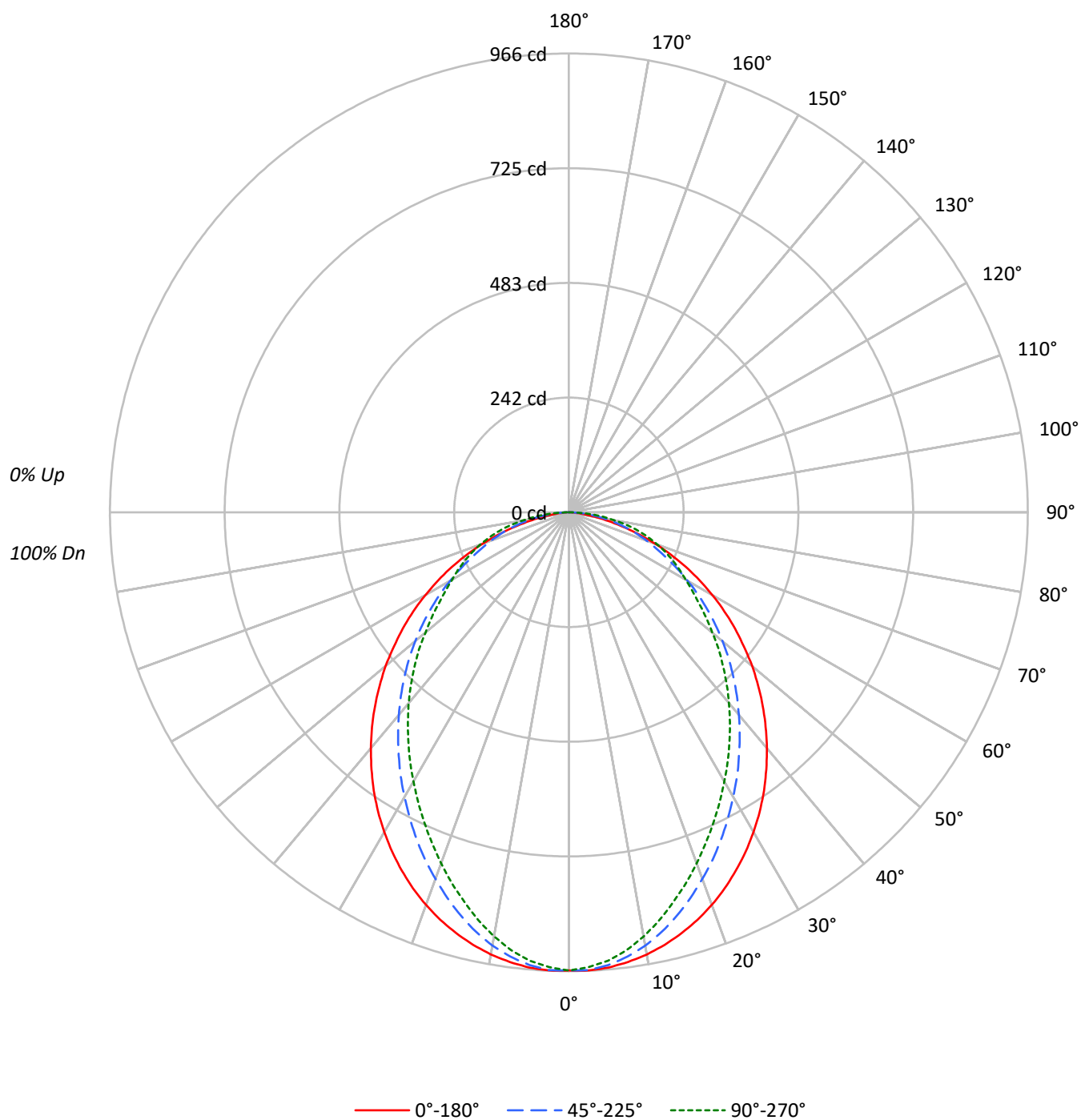
Input Watts (W): 44.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P189191

CATALOG NUMBER: MAE-G-2-LD4-UNV-EXAM-HI-40-WDDCPH

Luminous Intensity Polar Plot





TEST NUMBER: P189191

CATALOG NUMBER: MAE-G-2-LD4-UNV-EXAM-HI-40-WDDCPH

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			0
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			100
1	109	105	101	97	107	102	99	95		98	95	92			94	92	89			85
2	100	92	85	80	97	90	84	79		86	81	77			83	79	75			71
3	91	81	73	67	89	80	72	66		77	70	65			74	69	64			61
4	84	72	64	57	82	71	63	57		68	62	56			66	60	55			52
5	77	65	56	50	75	64	56	49		62	54	49			60	53	48			46
6	72	59	50	44	70	58	50	44		56	49	43			54	48	43			40
7	67	53	45	39	65	53	45	39		51	44	39			50	43	38			36
8	62	49	41	35	61	48	40	35		47	40	35			46	39	34			32
9	58	45	37	32	57	44	37	32		43	36	31			42	36	31			29
10	55	42	34	29	53	41	34	29		40	33	29			39	33	29			27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10445	10445	10445
5°	10456	10397	10298
10°	10393	10184	9970
15°	10281	9855	9520
20°	10136	9463	9062
25°	9942	9066	8606
30°	9719	8650	8180
35°	9462	8254	7788
40°	9166	7867	7413
45°	8841	7490	7032
50°	8484	7111	6639
55°	8063	6706	6313
60°	7565	6252	6144
65°	6957	5796	6203
70°	6101	5500	6288
75°	4958	5226	6343
80°	3530	4795	6149
85°	2025	4162	5902



TEST NUMBER: P189191

CATALOG NUMBER: MAE-G-2-LD4-UNV-EXAM-HI-40-WDDCPH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.2	4.1
10°-20°	247.6	11.2
20°-30°	353.1	15.9
30°-40°	399.3	18.0
40°-50°	388.7	17.5
50°-60°	328.7	14.8
60°-70°	239.1	10.8
70°-80°	135.4	6.1
80°-90°	37.1	1.7
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°	690.9	31.1
0°-40°	1090.2	49.1
0°-60°	1807.5	81.5
0°-90°	2219.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2219.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	965	965	965	965	965	
5°	962	962	956	945	947	91
15°	917	907	879	851	849	259
25°	832	808	759	726	720	383
35°	716	681	624	595	589	447
45°	577	541	489	466	459	445
55°	427	394	355	338	334	381
65°	272	244	226	237	242	268
75°	118	106	125	144	152	127
85°	16	22	34	43	48	23
90°	0	0	0	0	0	



TEST NUMBER: P189191

CATALOG NUMBER: MAE-G-2-LD4-UNV-EXAM-HI-40-WDDCPH

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	964.6	964.6	964.6	964.6	964.6
2.5°	965.5	966.9	964.6	955.1	958.3
5°	961.9	961.5	956.5	944.7	947.4
7.5°	954.7	952.4	943.4	928.4	929.8
10°	945.2	940.6	926.2	906.7	906.7
12.5°	932.5	925.3	904.4	880.5	879.6
15°	917.1	907.2	879.1	851.1	849.2
17.5°	899.5	886.3	851.1	820.3	818.9
20°	879.6	862.8	821.2	789.5	786.4
22.5°	856.9	836.6	791.3	758.3	753.3
25°	832.1	808.1	758.8	725.7	720.3
27.5°	805.8	778.7	725.3	692.7	687.3
30°	777.3	747.4	691.8	660.1	654.2
32.5°	747.4	714.9	658.8	628.0	622.1
35°	715.8	680.9	624.4	595.4	589.1
37.5°	682.3	647.5	590.4	563.3	556.5
40°	648.4	612.6	556.5	530.7	524.4
42.5°	613.1	577.3	523.0	498.6	491.8
45°	577.3	540.7	489.1	466.5	459.2
47.5°	540.2	504.9	456.1	434.4	428.0
50°	503.6	468.3	422.1	402.2	394.1
52.5°	463.8	430.7	388.7	369.7	363.8
55°	427.1	393.6	355.2	338.4	334.4
57.5°	388.2	357.0	322.1	309.9	307.7
60°	349.3	319.4	288.7	282.8	283.7
62.5°	309.9	281.4	257.0	258.3	263.3
65°	271.5	244.3	226.2	237.1	242.1
67.5°	231.7	208.1	198.6	215.4	220.8
70°	192.7	171.0	173.7	191.8	198.6
72.5°	154.7	137.5	149.3	168.8	175.1
75°	118.5	106.3	124.9	144.3	151.6
77.5°	85.5	79.2	100.4	119.0	126.7
80°	56.6	57.5	76.9	93.7	98.6
82.5°	33.5	38.0	54.3	67.4	72.4
85°	16.3	21.7	33.5	43.0	47.5
87.5°	5.4	9.0	14.5	16.3	15.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)