

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: METALUX

Report Number: P35053

Luminaire Tested: **24EN-LD2-70HP-UNV-L835-CD1-U**

Test Date: 08/03/16

Test Information

Test Method: LM-79-08
Report Number: P35053
Test Lab: INNOVATION CENTER-P3
Test Date: 08/03/16
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-70HP-UNV-L835-CD1-U
Description: ENCOUNTER 2X4 LED TROFFER
Light Source: (392) EATON 3500K LEDS
EL232N098E835
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER @ 1180 mA
OT50W/PRG1400C/UNV/DIM/L

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7117.6 lumens
Efficiency: N/A
Efficacy: 130.6 lumens/watt
Spacing Criteria (0/90/45): 1.39 / 1.4 / 1.41
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

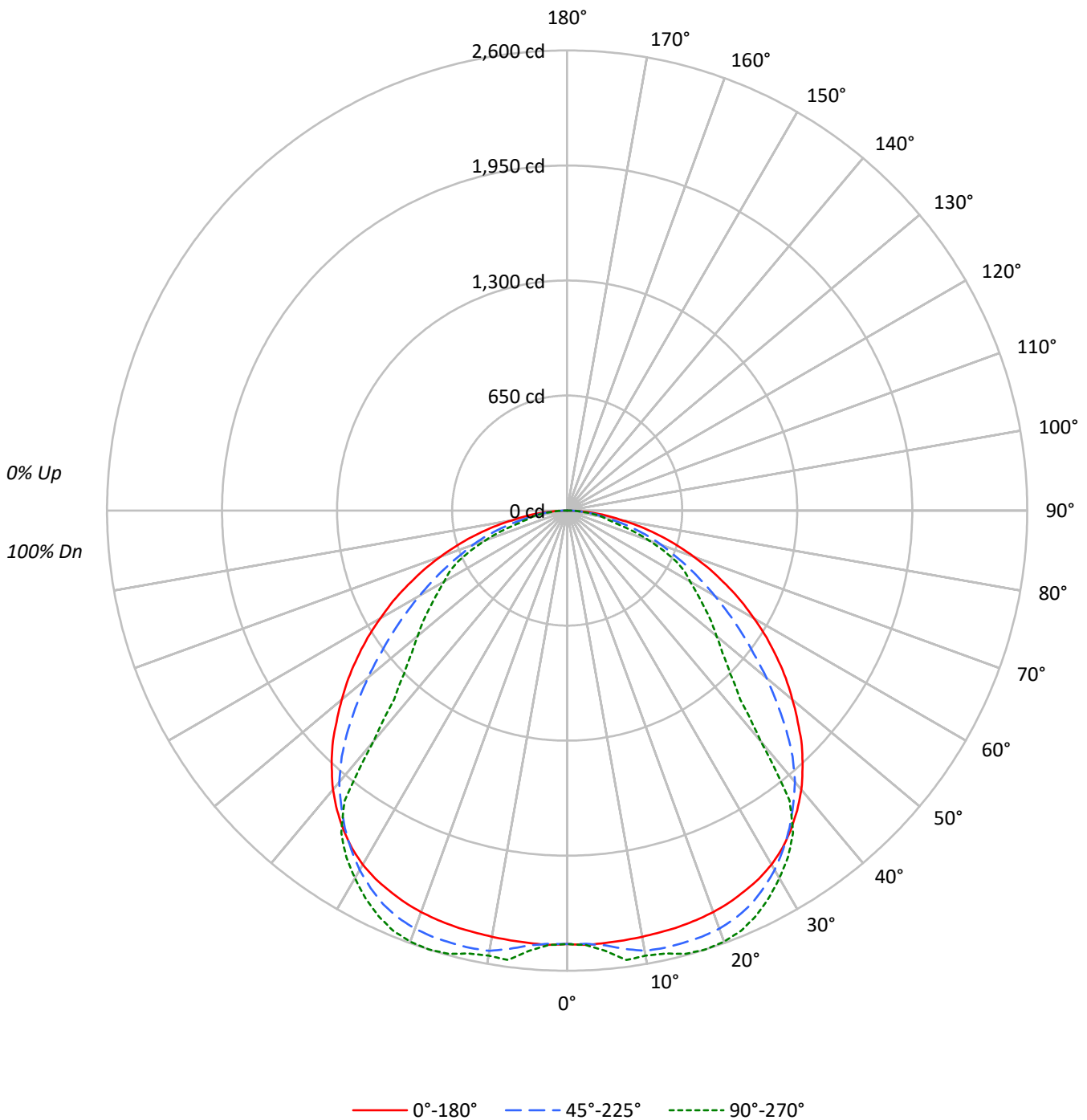
Input Watts (W): 54.5
Input Voltage (V): 120.0
Input Current (Ain): 0.456
Voltage Rise (V): NR
Power Factor: 0.9999
Total Harmonic Distortion (THDi): 8.01%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 5 HR
Ambient Temperature (°C): 24.7
Test Distance: 25 FT



TEST NUMBER: P35053

CATALOG NUMBER: 24EN-LD2-70HP-UNV-L835-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P35053

CATALOG NUMBER: 24EN-LD2-70HP-UNV-L835-CD1-U

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	88	87	85
2	100	92	85	79	97	90	84	78	86	81	77	83	79	75	80	76	73	71
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	60
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31
9	57	44	36	31	56	44	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3751	3751	3751
5°	3771	3790	3839
10°	3803	3929	3971
15°	3861	4010	4110
20°	3935	4098	4225
25°	4009	4151	4269
30°	4085	4147	4241
35°	4119	4095	4160
40°	4117	4005	3401
45°	4063	3791	2822
50°	3960	3500	2623
55°	3864	3210	2515
60°	3734	2950	2457
65°	3592	2722	2464
70°	3417	2535	2199
75°	3178	2290	1740
80°	2778	1852	1764
85°	2583	1792	1652



TEST NUMBER: P35053

CATALOG NUMBER: 24EN-LD2-70HP-UNV-L835-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	237.3	3.3
10°-20°	712.6	10.0
20°-30°	1128.6	15.9
30°-40°	1363.8	19.2
40°-50°	1283.4	18.0
50°-60°	1064.7	15.0
60°-70°	778.7	10.9
70°-80°	425.5	6.0
80°-90°	123.0	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°	2078.5	29.2
0°-40°	3442.3	48.4
0°-60°	5790.4	81.4
0°-90°	7117.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7117.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2449	2449	2449	2449	2449	
5°	2453	2451	2465	2480	2497	234
15°	2435	2467	2529	2562	2592	689
25°	2372	2402	2456	2503	2526	1095
35°	2203	2172	2190	2213	2225	1377
45°	1876	1801	1750	1490	1303	1443
55°	1447	1361	1202	993	942	1293
65°	991	900	751	668	680	982
75°	537	465	387	313	294	567
85°	147	115	102	94	94	160
90°	0	0	0	0	0	



TEST NUMBER: P35053

CATALOG NUMBER: 24EN-LD2-70HP-UNV-L835-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2449	2449	2449	2449	2449
2.5°	2456	2449	2450	2448	2457
5°	2453	2451	2465	2480	2497
7.5°	2449	2455	2498	2540	2561
10°	2445	2463	2526	2546	2553
12.5°	2440	2468	2531	2545	2563
15°	2435	2467	2529	2562	2592
17.5°	2426	2461	2525	2572	2600
20°	2414	2451	2514	2563	2592
22.5°	2397	2431	2491	2542	2569
25°	2372	2402	2456	2503	2526
27.5°	2346	2362	2405	2448	2468
30°	2310	2310	2345	2379	2398
32.5°	2262	2246	2271	2305	2322
35°	2203	2172	2190	2213	2225
37.5°	2135	2091	2098	2091	2064
40°	2059	2001	2003	1877	1701
42.5°	1969	1902	1885	1677	1448
45°	1876	1801	1750	1490	1303
47.5°	1768	1693	1607	1342	1191
50°	1662	1589	1469	1210	1101
52.5°	1558	1477	1330	1095	1025
55°	1447	1361	1202	993	942
57.5°	1336	1246	1080	898	869
60°	1219	1127	963	818	802
62.5°	1108	1013	854	744	750
65°	991	900	751	668	680
67.5°	877	786	651	587	588
70°	763	672	566	499	491
72.5°	648	570	481	409	393
75°	537	465	387	313	294
77.5°	426	376	294	235	232
80°	315	295	210	195	200
82.5°	232	206	159	147	146
85°	147	115	102	94	94
87.5°	50	51	48	48	49
90°	0	0	0	0	0

(END OF REPORT)