

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: P35043

Luminaire Tested: **22EN-LD2-39-HP-UNV-L835-CD1-U**

Test Date: 09/24/16

**Test Information**

Test Method: LM-79-08  
Report Number: P35043  
Test Lab: INNOVATION CENTER-P3  
Test Date: 09/24/16  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22EN-LD2-39-HP-UNV-L835-CD1-U  
Description: ENCOUNTER 2X2 LED TROFFER  
Light Source: (196) EATON 3500K LEDS  
EL232N098E835  
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER @ 680 mA  
OT50W/PRG1400C/UNV/DIM/L

**Summary**

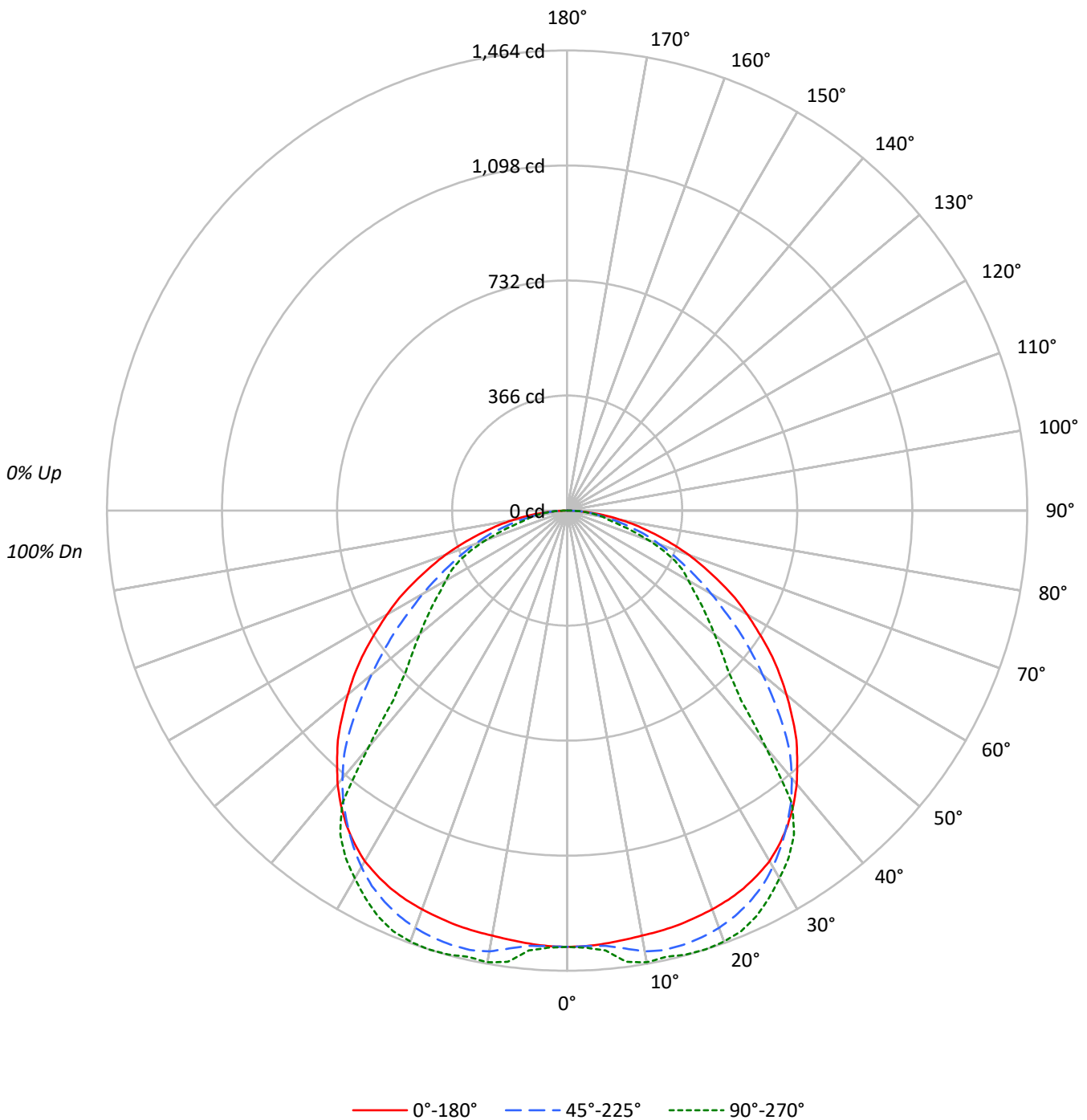
Lumens per Lamp: N/A  
Luminaire Lumens: 3965.2 lumens  
Efficiency: N/A  
Efficacy: 126.3 lumens/watt  
Spacing Criteria (0/90/45): 1.37 / 1.4 / 1.4  
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 31.4  
Input Voltage (V): 120.0  
Input Current (Ain): 0.263  
Voltage Rise (V): NR  
Power Factor: 0.9981  
Total Harmonic Distortion (THDi): 7.98%  
Frequency (hertz): 60  
Stabilization Time: 0.5 HR  
Operation Time: 5 HR  
Ambient Temperature (°C): 24.5  
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	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	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	79	97	90	84	79	86	81	77	83	79	75	80	76	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52
5	77	64	56	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	43	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	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	32
9	58	44	36	31	56	44	36	31	43	35	30	42	35	30	41	35	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	28	38	32	27	26

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4445	4445	4445
5°	4446	4468	4517
10°	4465	4631	4745
15°	4526	4741	4847
20°	4601	4816	4972
25°	4689	4855	5032
30°	4763	4841	4996
35°	4781	4766	4918
40°	4749	4649	4105
45°	4674	4407	3288
50°	4539	4046	3049
55°	4405	3719	2909
60°	4240	3388	2857
65°	4054	3122	2872
70°	3858	2921	2575
75°	3564	2660	2091
80°	3283	2232	2121
85°	2682	2278	2205



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.0	3.4
10°-20°	401.9	10.1
20°-30°	633.1	16.0
30°-40°	763.4	19.3
40°-50°	713.9	18.0
50°-60°	585.8	14.8
60°-70°	427.0	10.8
70°-80°	235.8	5.9
80°-90°	70.3	1.8
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°	1169.0	29.5
0°-40°	1932.4	48.7
0°-60°	3232.0	81.5
0°-90°	3965.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3965.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1388	1388	1388	1388	1388	
5°	1383	1384	1390	1400	1405	132
15°	1365	1389	1430	1449	1462	386
25°	1327	1346	1374	1408	1424	612
35°	1223	1211	1219	1248	1258	764
45°	1032	997	973	839	726	793
55°	789	748	666	548	521	704
65°	535	490	412	368	379	531
75°	288	258	215	176	169	307
85°	73	62	62	57	60	86
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1388	1388	1388	1388	1388
2.5°	1387	1386	1387	1390	1392
5°	1383	1384	1390	1400	1405
7.5°	1378	1384	1405	1434	1448
10°	1373	1387	1424	1453	1459
12.5°	1370	1390	1432	1448	1454
15°	1365	1389	1430	1449	1462
17.5°	1358	1385	1424	1449	1464
20°	1350	1377	1413	1442	1459
22.5°	1340	1364	1396	1430	1448
25°	1327	1346	1374	1408	1424
27.5°	1309	1322	1346	1377	1390
30°	1288	1291	1309	1339	1351
32.5°	1258	1254	1267	1296	1311
35°	1223	1211	1219	1248	1258
37.5°	1182	1164	1170	1179	1176
40°	1136	1109	1112	1061	982
42.5°	1083	1054	1050	946	818
45°	1032	997	973	839	726
47.5°	971	937	891	748	666
50°	911	876	812	673	612
52.5°	851	809	737	607	564
55°	789	748	666	548	521
57.5°	723	681	593	496	478
60°	662	617	529	449	446
62.5°	601	553	469	409	417
65°	535	490	412	368	379
67.5°	472	428	361	324	330
70°	412	368	312	276	275
72.5°	348	311	266	227	220
75°	288	258	215	176	169
77.5°	232	208	168	135	132
80°	178	159	121	113	115
82.5°	125	110	93	86	88
85°	73	62	62	57	60
87.5°	31	28	31	30	32
90°	0	0	0	0	0

(END OF REPORT)