

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: P474793

Luminaire Tested: **22CZ2-39-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474793
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, RIBBED LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3942.9 lumens
Efficiency: N/A
Efficacy: 134.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

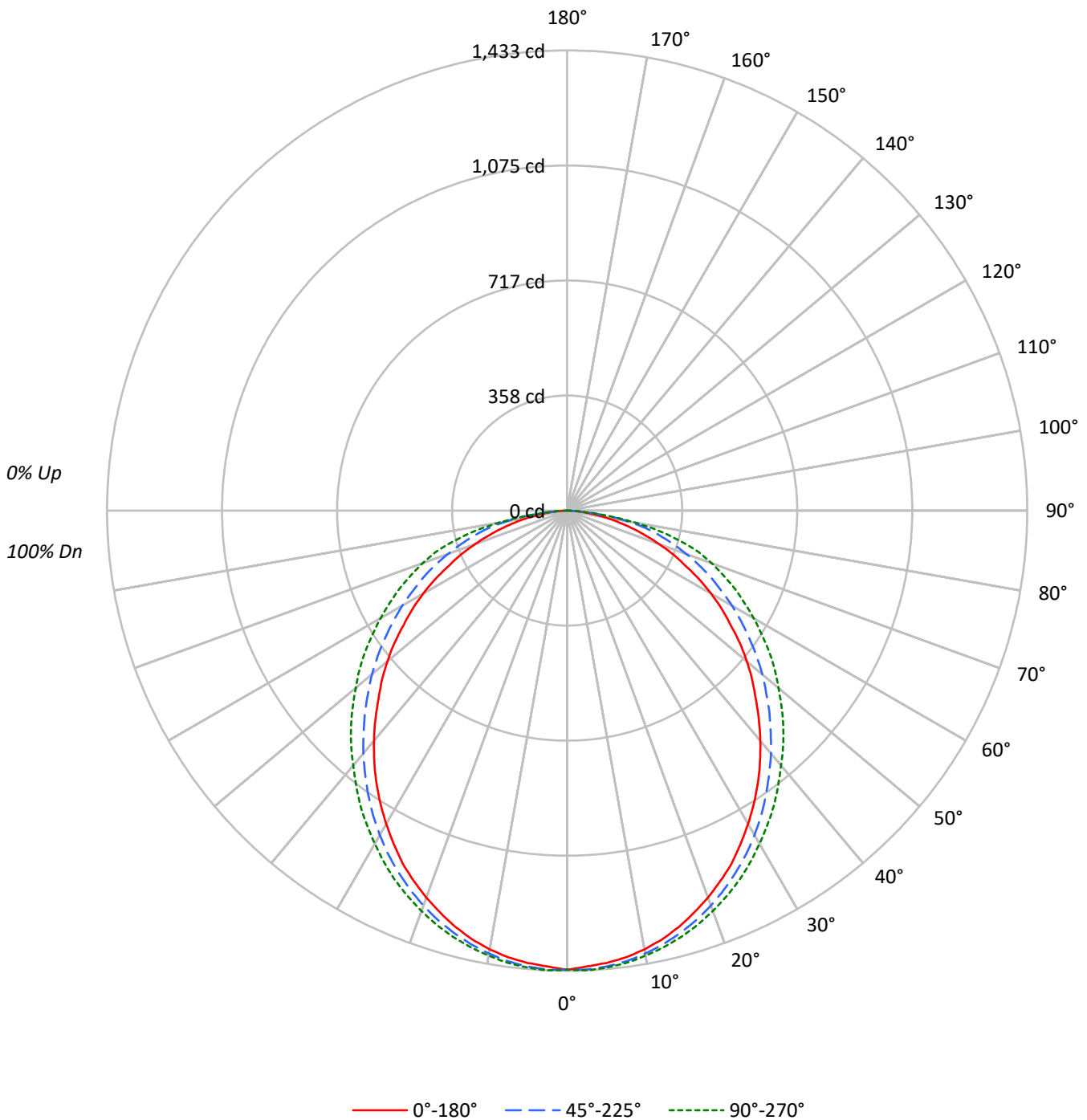
Input Watts (W): 29.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	73	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3848	3848	3848
5°	3820	3849	3858
10°	3791	3827	3846
15°	3740	3793	3828
20°	3672	3749	3799
25°	3600	3691	3768
30°	3501	3625	3723
35°	3402	3548	3687
40°	3287	3469	3641
45°	3162	3390	3624
50°	3059	3321	3597
55°	2916	3248	3605
60°	2785	3193	3615
65°	2589	3152	3671
70°	2393	3108	3763
75°	2140	3093	3786
80°	1795	2932	3305
85°	1389	2007	1877



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.1	3.4
10°-20°	383.5	9.7
20°-30°	571.8	14.5
30°-40°	675.0	17.1
40°-50°	688.0	17.4
50°-60°	620.4	15.7
60°-70°	487.7	12.4
70°-80°	305.3	7.7
80°-90°	76.1	1.9
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°	1090.4	27.7
0°-40°	1765.4	44.8
0°-60°	3073.8	78.0
0°-90°	3942.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3942.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1430	1430	1430	1430	1430	
5°	1414	1417	1425	1428	1428	134
15°	1342	1348	1362	1372	1374	378
25°	1212	1222	1243	1262	1269	557
35°	1036	1049	1080	1110	1122	647
45°	831	849	891	934	952	643
55°	622	641	692	746	768	558
65°	407	432	495	550	577	405
75°	206	237	298	351	364	219
85°	45	58	65	65	61	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1429.9	1429.9	1429.9	1429.9	1429.9
2.5°	1420.7	1424.0	1430.7	1433.2	1433.2
5°	1414.0	1417.4	1424.9	1428.2	1428.2
7.5°	1403.2	1406.5	1415.7	1419.9	1420.7
10°	1387.4	1391.5	1400.7	1407.4	1407.4
12.5°	1367.4	1371.6	1383.2	1391.5	1392.4
15°	1342.4	1348.2	1361.6	1371.6	1374.1
17.5°	1313.2	1322.4	1337.4	1349.9	1352.4
20°	1282.4	1291.6	1309.1	1323.2	1326.6
22.5°	1248.2	1256.6	1277.4	1294.9	1299.1
25°	1212.4	1221.6	1243.2	1262.4	1269.1
27.5°	1169.9	1180.7	1206.6	1228.2	1234.9
30°	1126.6	1139.9	1166.6	1190.7	1198.2
32.5°	1082.4	1094.9	1124.9	1150.7	1160.7
35°	1035.7	1049.1	1079.9	1109.9	1122.4
37.5°	986.6	999.9	1033.2	1067.4	1079.1
40°	935.8	951.6	987.4	1024.1	1036.6
42.5°	884.1	900.8	938.3	979.1	995.7
45°	830.8	849.1	890.8	934.1	952.4
47.5°	782.4	797.4	840.8	888.3	905.8
50°	730.8	744.9	793.3	840.8	859.1
52.5°	678.3	691.6	743.3	793.3	815.8
55°	621.6	640.8	692.4	745.8	768.3
57.5°	571.6	589.1	642.4	696.6	718.3
60°	517.5	535.8	593.3	648.3	671.6
62.5°	463.3	483.3	541.6	600.8	622.4
65°	406.6	431.6	495.0	550.0	576.6
67.5°	358.3	382.5	445.0	502.5	525.8
70°	304.1	332.5	395.0	453.3	478.3
72.5°	253.3	281.6	345.8	404.1	429.1
75°	205.8	236.6	297.5	350.8	364.1
77.5°	160.0	189.2	250.0	280.8	295.0
80°	115.8	144.2	189.2	210.0	213.3
82.5°	78.3	102.5	128.3	134.2	130.8
85°	45.0	57.5	65.0	65.0	60.8
87.5°	18.3	18.3	15.8	10.0	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)