

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: P272050

Luminaire Tested: **22CZ2-44-S-UNV-L935-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P272050
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44-S-UNV-L935-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (98) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

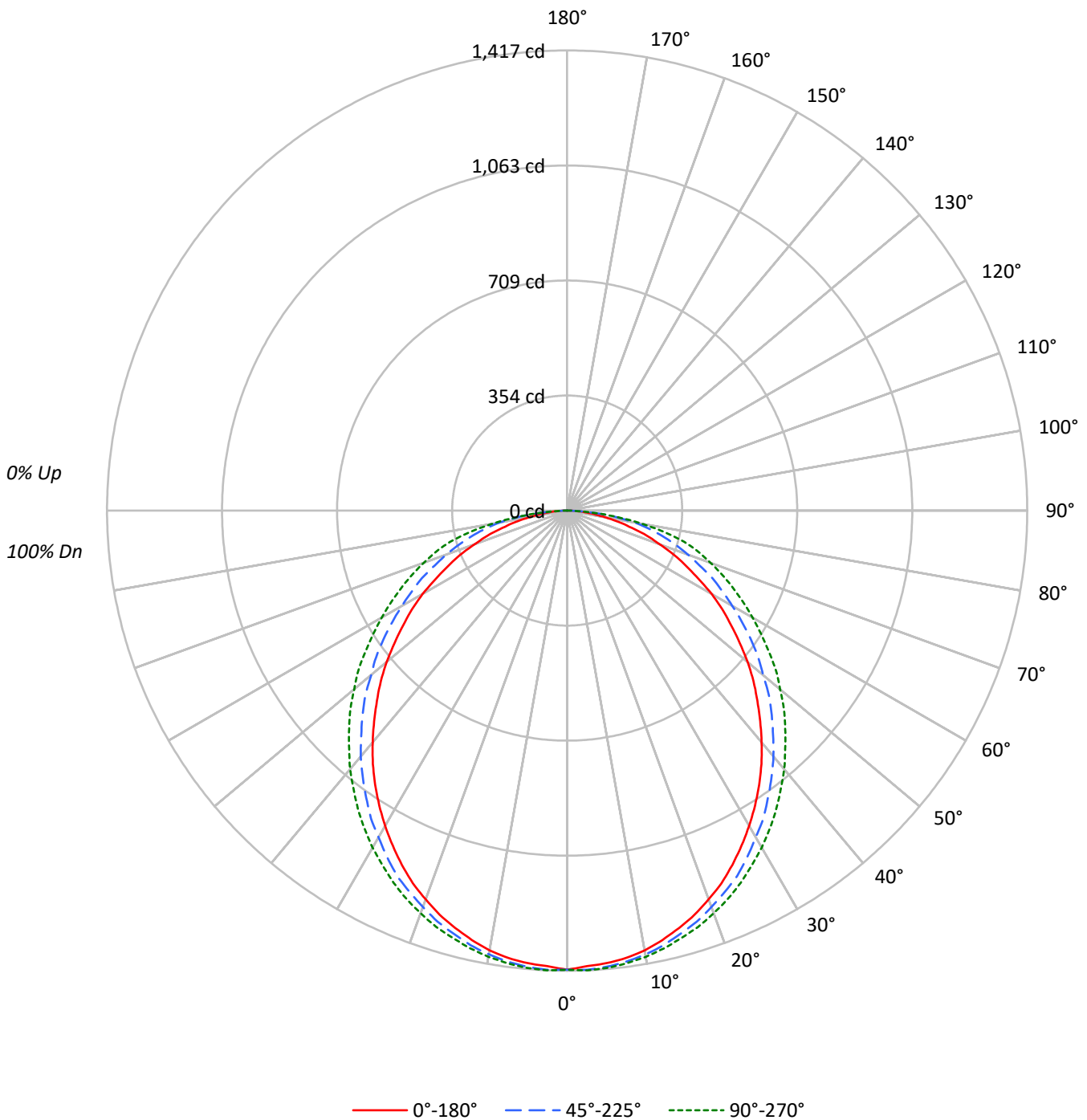
Lumens per Lamp: N/A
Luminaire Lumens: 3945.0 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 42.7
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



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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	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					100			
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3804	3804	3804
5°	3779	3809	3818
10°	3757	3792	3812
15°	3707	3759	3795
20°	3647	3721	3779
25°	3574	3684	3755
30°	3483	3609	3723
35°	3386	3543	3688
40°	3272	3472	3653
45°	3152	3390	3615
50°	3036	3298	3583
55°	2893	3238	3558
60°	2764	3160	3547
65°	2578	3141	3586
70°	2375	3113	3693
75°	2144	3158	3885
80°	1853	3251	3651
85°	1535	2729	2729



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.7	3.4
10°-20°	380.4	9.6
20°-30°	569.2	14.4
30°-40°	674.1	17.1
40°-50°	687.0	17.4
50°-60°	615.7	15.6
60°-70°	482.1	12.2
70°-80°	310.9	7.9
80°-90°	91.8	2.3
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°	1083.3	27.5
0°-40°	1757.5	44.5
0°-60°	3060.2	77.6
0°-90°	3945.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3945.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1414	1414	1414	1414	1414	
5°	1399	1403	1410	1412	1414	133
15°	1331	1338	1349	1360	1362	375
25°	1204	1215	1241	1257	1264	554
35°	1031	1044	1079	1112	1123	644
45°	828	847	891	937	950	640
55°	617	637	690	738	758	553
65°	405	429	493	541	563	402
75°	206	237	304	355	374	221
85°	50	68	88	88	88	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1413.6	1413.6	1413.6	1413.6	1413.6
2.5°	1404.4	1408.1	1415.5	1417.3	1417.3
5°	1398.9	1402.6	1409.9	1411.8	1413.6
7.5°	1389.7	1391.5	1400.7	1404.4	1406.3
10°	1375.0	1378.6	1387.8	1393.4	1395.2
12.5°	1354.7	1360.2	1371.3	1378.6	1380.5
15°	1330.8	1338.1	1349.2	1360.2	1362.1
17.5°	1305.0	1312.4	1327.1	1340.0	1343.7
20°	1273.7	1282.9	1299.5	1314.2	1319.7
22.5°	1242.4	1249.8	1270.0	1288.5	1294.0
25°	1203.8	1214.8	1240.6	1257.2	1264.5
27.5°	1163.3	1176.2	1201.9	1224.0	1231.4
30°	1121.0	1133.8	1161.4	1189.1	1198.3
32.5°	1076.8	1091.5	1124.6	1152.2	1161.4
35°	1030.8	1043.6	1078.6	1111.8	1122.8
37.5°	982.9	993.9	1034.4	1069.4	1080.5
40°	931.4	946.1	988.4	1028.9	1040.0
42.5°	879.8	896.4	938.7	982.9	993.9
45°	828.3	846.7	890.9	936.9	949.8
47.5°	778.6	793.3	843.0	887.2	905.6
50°	725.2	739.9	787.8	837.5	855.9
52.5°	670.0	690.2	741.8	789.6	811.7
55°	616.6	636.9	690.2	738.1	758.3
57.5°	566.9	583.5	638.7	688.4	708.6
60°	513.5	528.3	587.2	640.5	659.0
62.5°	456.5	478.6	539.3	589.0	611.1
65°	404.9	428.9	493.3	541.2	563.2
67.5°	357.1	379.2	441.8	493.3	517.2
70°	301.9	331.3	395.7	447.3	469.4
72.5°	257.7	283.5	349.7	401.3	425.2
75°	206.2	237.4	303.7	355.2	373.7
77.5°	163.8	195.1	257.7	298.2	307.4
80°	119.6	150.9	209.8	230.1	235.6
82.5°	81.0	110.4	150.9	156.5	158.3
85°	49.7	68.1	88.4	88.4	88.4
87.5°	23.9	27.6	31.3	29.5	29.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)