

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: P272003

Luminaire Tested: **22CZ2-44HE-UNV-L940-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: P272003
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44HE-UNV-L940-CD1-U
Description: 2'X2' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (196) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3813.0 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

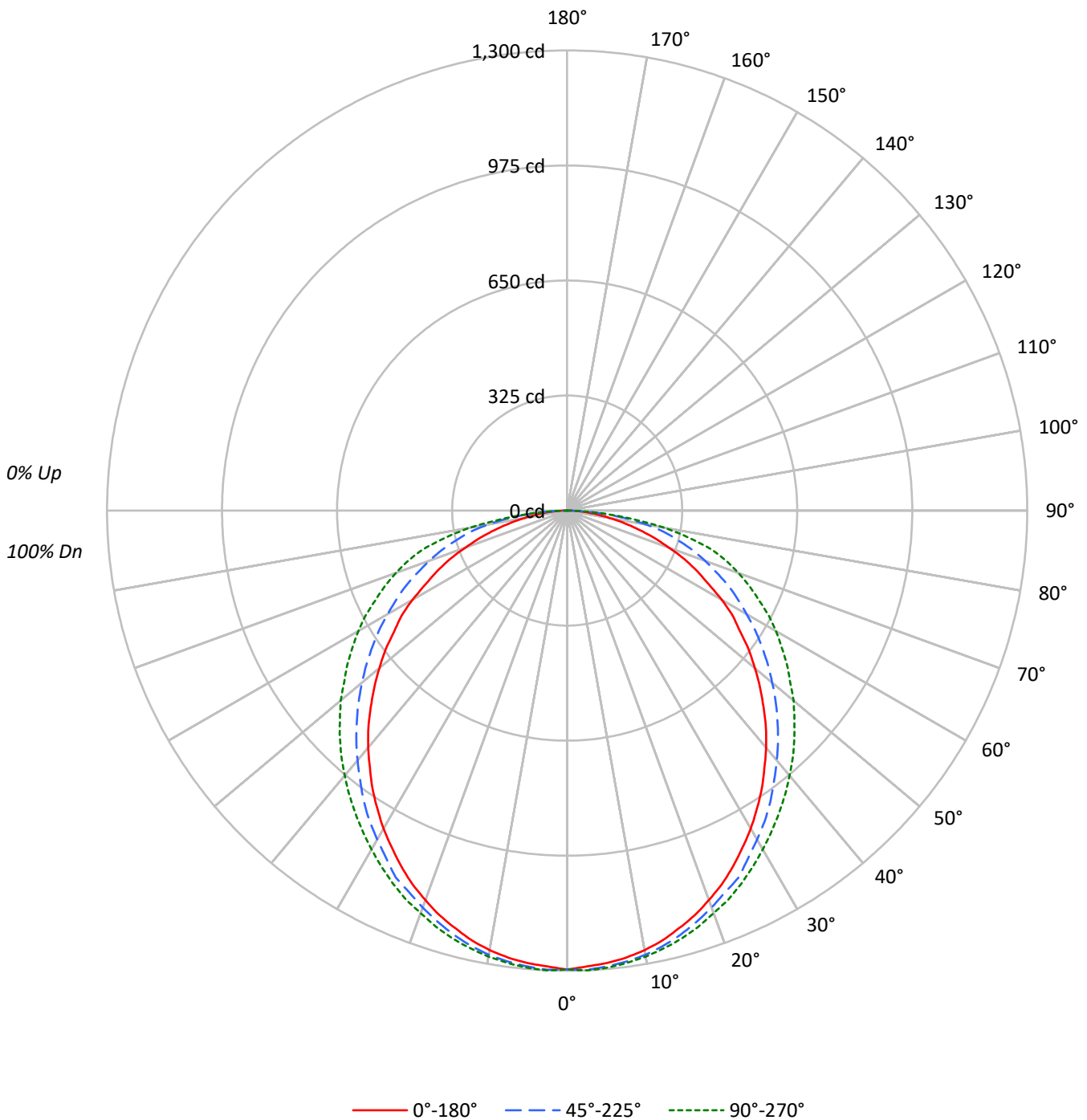
Input Watts (W): 35
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3489	3489	3489
5°	3467	3492	3502
10°	3445	3481	3496
15°	3403	3455	3487
20°	3353	3417	3466
25°	3293	3398	3454
30°	3224	3335	3434
35°	3150	3291	3427
40°	3071	3236	3434
45°	2985	3199	3456
50°	2898	3165	3495
55°	2799	3151	3556
60°	2716	3151	3666
65°	2581	3202	3799
70°	2406	3263	4045
75°	2204	3375	4370
80°	1918	3518	4303
85°	1680	3128	3418



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.6	3.2
10°-20°	349.2	9.2
20°-30°	524.3	13.7
30°-40°	626.5	16.4
40°-50°	651.4	17.1
50°-60°	603.8	15.8
60°-70°	495.2	13.0
70°-80°	334.8	8.8
80°-90°	105.2	2.8
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°	996.1	26.1
0°-40°	1622.6	42.6
0°-60°	2877.8	75.5
0°-90°	3813.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3813.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1296	1296	1296	1296	1296	
5°	1283	1285	1293	1295	1296	122
15°	1221	1227	1240	1248	1252	345
25°	1109	1118	1144	1158	1163	511
35°	959	972	1002	1032	1043	599
45°	784	799	841	889	908	606
55°	597	615	672	732	758	536
65°	405	428	503	568	597	401
75°	212	248	325	390	420	225
85°	54	75	101	113	111	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1296.5	1296.5	1296.5	1296.5	1296.5
2.5°	1289.0	1292.7	1298.4	1300.2	1300.2
5°	1283.4	1285.2	1292.7	1294.6	1296.5
7.5°	1274.0	1277.7	1285.2	1287.1	1289.0
10°	1260.8	1264.6	1274.0	1277.7	1279.6
12.5°	1244.0	1247.7	1259.0	1264.6	1266.5
15°	1221.4	1227.1	1240.2	1247.7	1251.5
17.5°	1198.9	1204.6	1217.7	1228.9	1232.7
20°	1170.8	1183.9	1193.3	1208.3	1210.2
22.5°	1142.6	1150.1	1167.0	1182.0	1189.5
25°	1108.9	1118.2	1144.5	1157.6	1163.3
27.5°	1073.2	1086.4	1107.0	1127.6	1135.1
30°	1037.6	1046.9	1073.2	1097.6	1105.1
32.5°	998.2	1011.3	1039.4	1063.8	1075.1
35°	958.8	971.9	1001.9	1031.9	1043.2
37.5°	915.6	930.6	960.6	996.3	1011.3
40°	874.3	885.6	921.2	964.4	977.5
42.5°	831.2	844.3	881.8	928.7	943.8
45°	784.3	799.3	840.6	889.3	908.1
47.5°	739.2	754.3	799.3	848.1	870.6
50°	692.3	711.1	756.1	812.4	834.9
52.5°	647.3	664.2	714.9	773.0	793.7
55°	596.6	615.4	671.7	731.7	758.0
57.5°	555.4	568.5	630.4	692.3	718.6
60°	504.7	521.6	585.4	651.1	681.1
62.5°	450.3	478.4	544.1	611.7	641.7
65°	405.3	427.8	502.8	568.5	596.6
67.5°	358.4	382.8	455.9	525.4	557.2
70°	305.8	337.7	414.7	484.1	514.1
72.5°	258.9	292.7	371.5	439.0	470.9
75°	212.0	247.7	324.6	390.3	420.3
77.5°	167.0	206.4	281.4	332.1	350.9
80°	123.8	161.4	227.0	262.7	277.7
82.5°	86.3	118.2	167.0	185.7	189.5
85°	54.4	75.1	101.3	112.6	110.7
87.5°	24.4	30.0	37.5	41.3	39.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)