

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: P272043

Luminaire Tested: **22CZ2-39-S-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: P272043
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: 22CZ2-39-S-UNV-L940-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (98) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

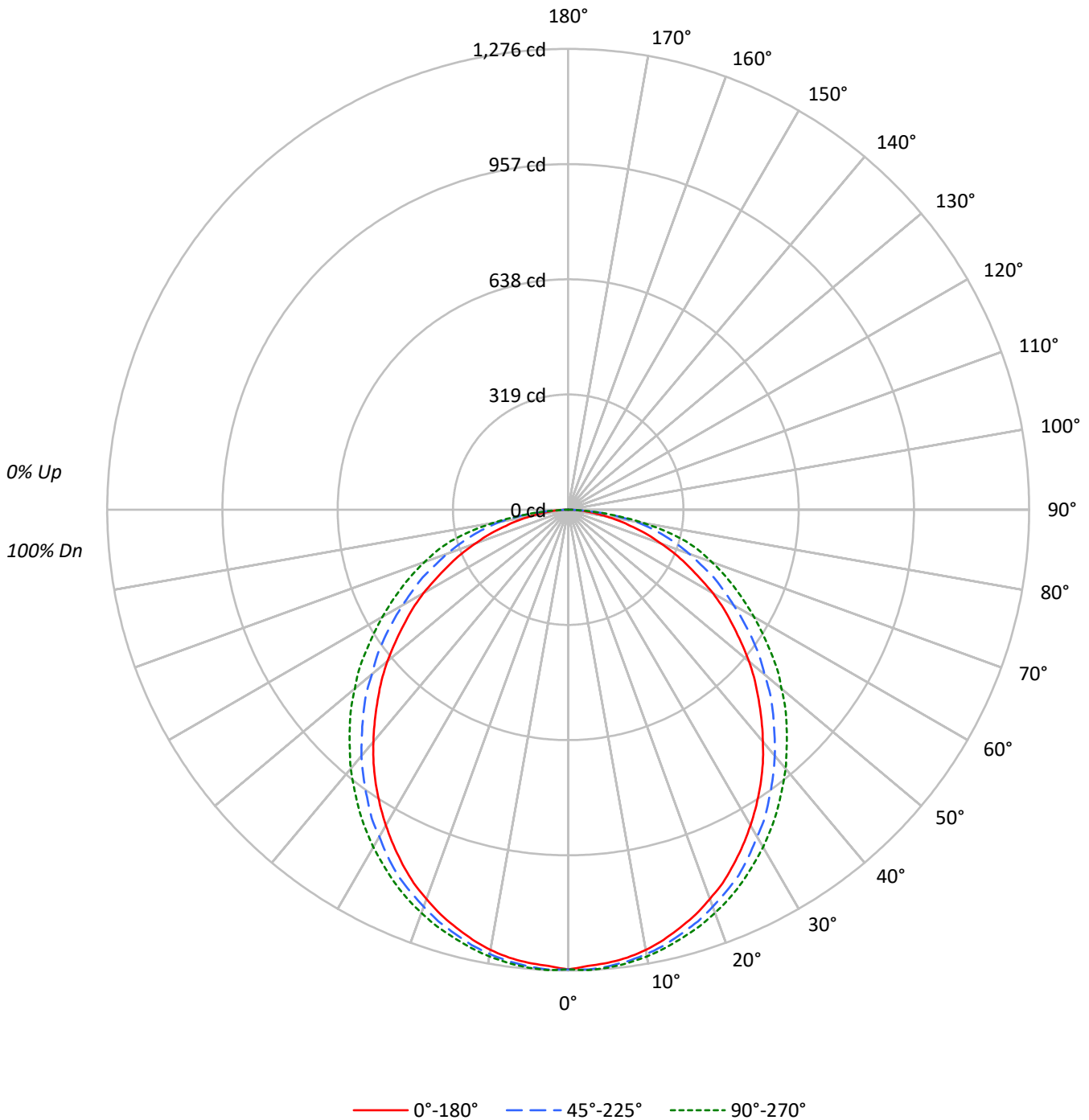
Lumens per Lamp: N/A
Luminaire Lumens: 3552.0 lumens
Efficiency: N/A
Efficacy: 103.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 34.5
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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3425	3425	3425
5°	3402	3429	3438
10°	3383	3415	3433
15°	3338	3384	3417
20°	3284	3351	3403
25°	3218	3317	3381
30°	3136	3249	3352
35°	3049	3190	3321
40°	2946	3126	3289
45°	2838	3052	3255
50°	2734	2969	3226
55°	2605	2916	3203
60°	2489	2845	3193
65°	2322	2828	3229
70°	2138	2803	3325
75°	1930	2844	3498
80°	1669	2927	3287
85°	1380	2455	2455



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.4	3.4
10°-20°	342.5	9.6
20°-30°	512.5	14.4
30°-40°	607.0	17.1
40°-50°	618.6	17.4
50°-60°	554.4	15.6
60°-70°	434.0	12.2
70°-80°	279.9	7.9
80°-90°	82.7	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°	975.4	27.5
0°-40°	1582.4	44.5
0°-60°	2755.4	77.6
0°-90°	3552.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3552.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1273	1273	1273	1273	1273	
5°	1260	1263	1270	1271	1273	120
15°	1198	1205	1215	1225	1226	338
25°	1084	1094	1117	1132	1139	499
35°	928	940	971	1001	1011	580
45°	746	762	802	844	855	576
55°	555	573	622	665	683	498
65°	365	386	444	487	507	362
75°	186	214	274	320	336	199
85°	45	61	80	80	80	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1272.8	1272.8	1272.8	1272.8	1272.8
2.5°	1264.5	1267.8	1274.4	1276.1	1276.1
5°	1259.5	1262.8	1269.5	1271.1	1272.8
7.5°	1251.2	1252.9	1261.2	1264.5	1266.2
10°	1238.0	1241.3	1249.6	1254.6	1256.2
12.5°	1219.8	1224.7	1234.7	1241.3	1243.0
15°	1198.2	1204.8	1214.8	1224.7	1226.4
17.5°	1175.0	1181.6	1194.9	1206.5	1209.8
20°	1146.8	1155.1	1170.0	1183.3	1188.3
22.5°	1118.7	1125.3	1143.5	1160.1	1165.1
25°	1083.9	1093.8	1117.0	1131.9	1138.6
27.5°	1047.4	1059.0	1082.2	1102.1	1108.7
30°	1009.3	1020.9	1045.7	1070.6	1078.9
32.5°	969.5	982.8	1012.6	1037.5	1045.7
35°	928.1	939.7	971.2	1001.0	1010.9
37.5°	885.0	894.9	931.4	962.9	972.8
40°	838.6	851.8	890.0	926.4	936.4
42.5°	792.2	807.1	845.2	885.0	894.9
45°	745.8	762.3	802.1	843.6	855.2
47.5°	701.0	714.3	759.0	798.8	815.4
50°	653.0	666.2	709.3	754.1	770.6
52.5°	603.3	621.5	667.9	711.0	730.9
55°	555.2	573.4	621.5	664.6	682.8
57.5°	510.4	525.4	575.1	619.8	638.1
60°	462.4	475.6	528.7	576.7	593.3
62.5°	411.0	430.9	485.6	530.3	550.2
65°	364.6	386.1	444.2	487.2	507.1
67.5°	321.5	341.4	397.7	444.2	465.7
70°	271.8	298.3	356.3	402.7	422.6
72.5°	232.0	255.2	314.9	361.3	382.8
75°	185.6	213.8	273.5	319.9	336.4
77.5°	147.5	175.7	232.0	268.5	276.8
80°	107.7	135.9	188.9	207.2	212.1
82.5°	72.9	99.4	135.9	140.9	142.5
85°	44.7	61.3	79.5	79.5	79.5
87.5°	21.5	24.9	28.2	26.5	26.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)