

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: P272002

Luminaire Tested: **22CZ2-44HE-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: P272002
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-L935-CD1-U
Description: 2'X2' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (196) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3774.0 lumens
Efficiency: N/A
Efficacy: 107.8 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

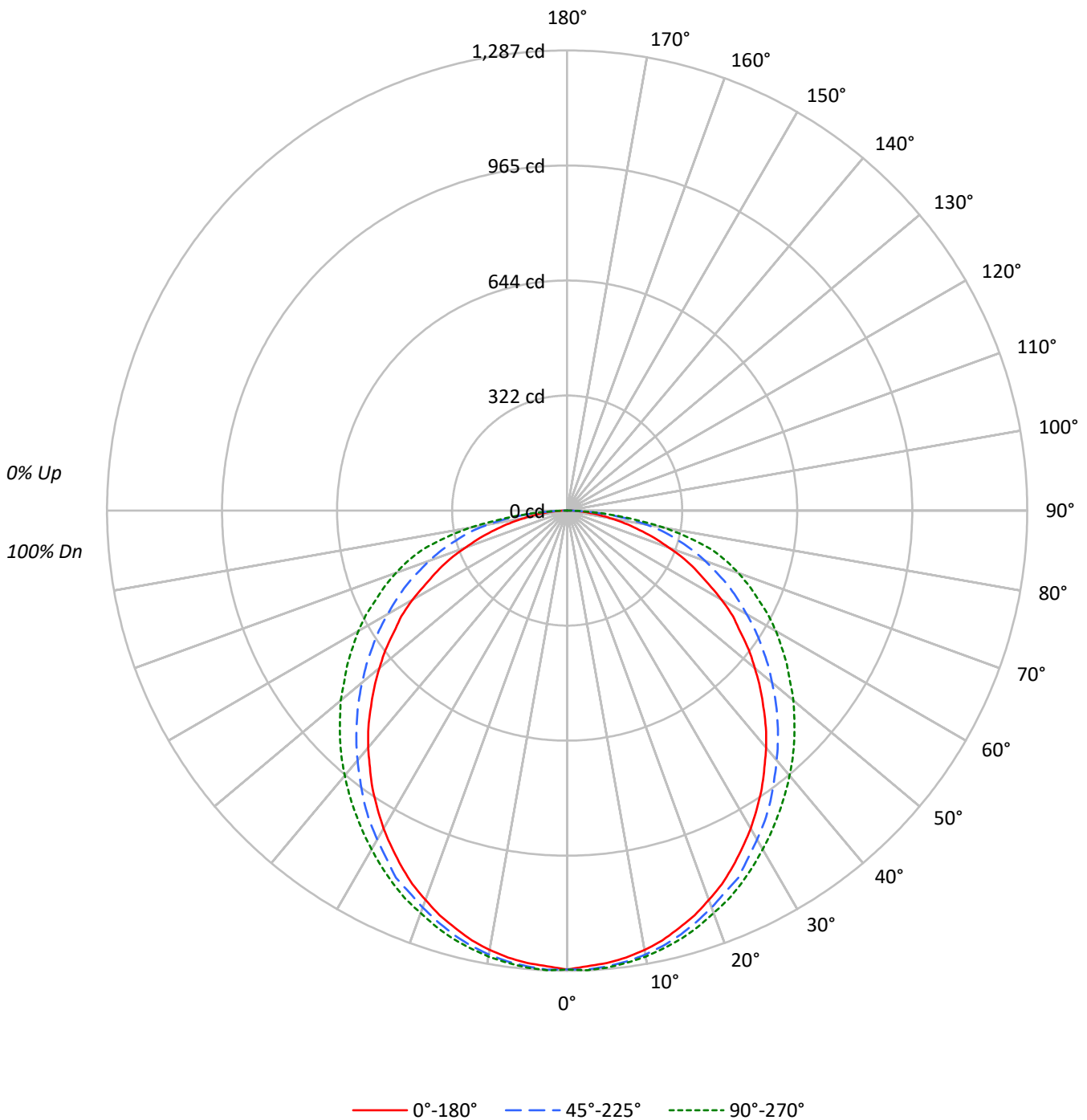
Input Watts (W): 35
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P272002

CATALOG NUMBER: 22CZ2-44HE-UNV-L935-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P272002

CATALOG NUMBER: 22CZ2-44HE-UNV-L935-CD1-U

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°	3453	3453	3453
5°	3431	3456	3466
10°	3410	3445	3461
15°	3368	3420	3451
20°	3318	3382	3430
25°	3259	3363	3419
30°	3191	3301	3399
35°	3118	3258	3392
40°	3040	3203	3399
45°	2954	3166	3420
50°	2869	3133	3460
55°	2770	3119	3520
60°	2688	3118	3628
65°	2554	3169	3760
70°	2382	3229	4003
75°	2181	3341	4325
80°	1900	3482	4259
85°	1664	3097	3384



TEST NUMBER: P272002

CATALOG NUMBER: 22CZ2-44HE-UNV-L935-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.4	3.2
10°-20°	345.7	9.2
20°-30°	518.9	13.7
30°-40°	620.1	16.4
40°-50°	644.8	17.1
50°-60°	597.6	15.8
60°-70°	490.2	13.0
70°-80°	331.4	8.8
80°-90°	104.1	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°	985.9	26.1
0°-40°	1606.0	42.6
0°-60°	2848.3	75.5
0°-90°	3774.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3774.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1283	1283	1283	1283	1283	
5°	1270	1272	1280	1281	1283	121
15°	1209	1214	1228	1235	1239	341
25°	1098	1107	1133	1146	1151	505
35°	949	962	992	1021	1032	593
45°	776	791	832	880	899	599
55°	590	609	665	724	750	531
65°	401	423	498	563	590	396
75°	210	245	321	386	416	223
85°	54	74	100	111	110	61
90°	0	0	0	0	0	



TEST NUMBER: P272002

CATALOG NUMBER: 22CZ2-44HE-UNV-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1283.2	1283.2	1283.2	1283.2	1283.2
2.5°	1275.8	1279.5	1285.1	1286.9	1286.9
5°	1270.2	1272.1	1279.5	1281.4	1283.2
7.5°	1260.9	1264.7	1272.1	1273.9	1275.8
10°	1247.9	1251.7	1260.9	1264.7	1266.5
12.5°	1231.2	1234.9	1246.1	1251.7	1253.5
15°	1208.9	1214.5	1227.5	1234.9	1238.7
17.5°	1186.7	1192.2	1205.2	1216.4	1220.1
20°	1158.8	1171.8	1181.1	1195.9	1197.8
22.5°	1131.0	1138.4	1155.1	1169.9	1177.4
25°	1097.5	1106.8	1132.8	1145.8	1151.4
27.5°	1062.2	1075.2	1095.7	1116.1	1123.5
30°	1027.0	1036.2	1062.2	1086.4	1093.8
32.5°	988.0	1001.0	1028.8	1053.0	1064.1
35°	949.0	962.0	991.7	1021.4	1032.5
37.5°	906.2	921.1	950.8	986.1	1001.0
40°	865.4	876.5	911.8	954.5	967.5
42.5°	822.7	835.7	872.8	919.2	934.1
45°	776.3	791.1	832.0	880.2	898.8
47.5°	731.7	746.5	791.1	839.4	861.7
50°	685.3	703.8	748.4	804.1	826.4
52.5°	640.7	657.4	707.5	765.1	785.5
55°	590.5	609.1	664.8	724.3	750.3
57.5°	549.7	562.7	624.0	685.3	711.3
60°	499.5	516.3	579.4	644.4	674.1
62.5°	445.7	473.6	538.5	605.4	635.1
65°	401.1	423.4	497.7	562.7	590.5
67.5°	354.7	378.8	451.3	520.0	551.5
70°	302.7	334.3	410.4	479.1	508.8
72.5°	256.3	289.7	367.7	434.6	466.1
75°	209.8	245.1	321.3	386.3	416.0
77.5°	165.3	204.3	278.6	328.7	347.3
80°	122.6	159.7	224.7	260.0	274.8
82.5°	85.4	117.0	165.3	183.8	187.6
85°	53.9	74.3	100.3	111.4	109.6
87.5°	24.1	29.7	37.1	40.9	39.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)