

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: P272001

Luminaire Tested: **22CZ2-44HE-UNV-L930-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: P272001
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-L930-CD1-U
Description: 2'X2' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (196) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3683.1 lumens
Efficiency: N/A
Efficacy: 105.2 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

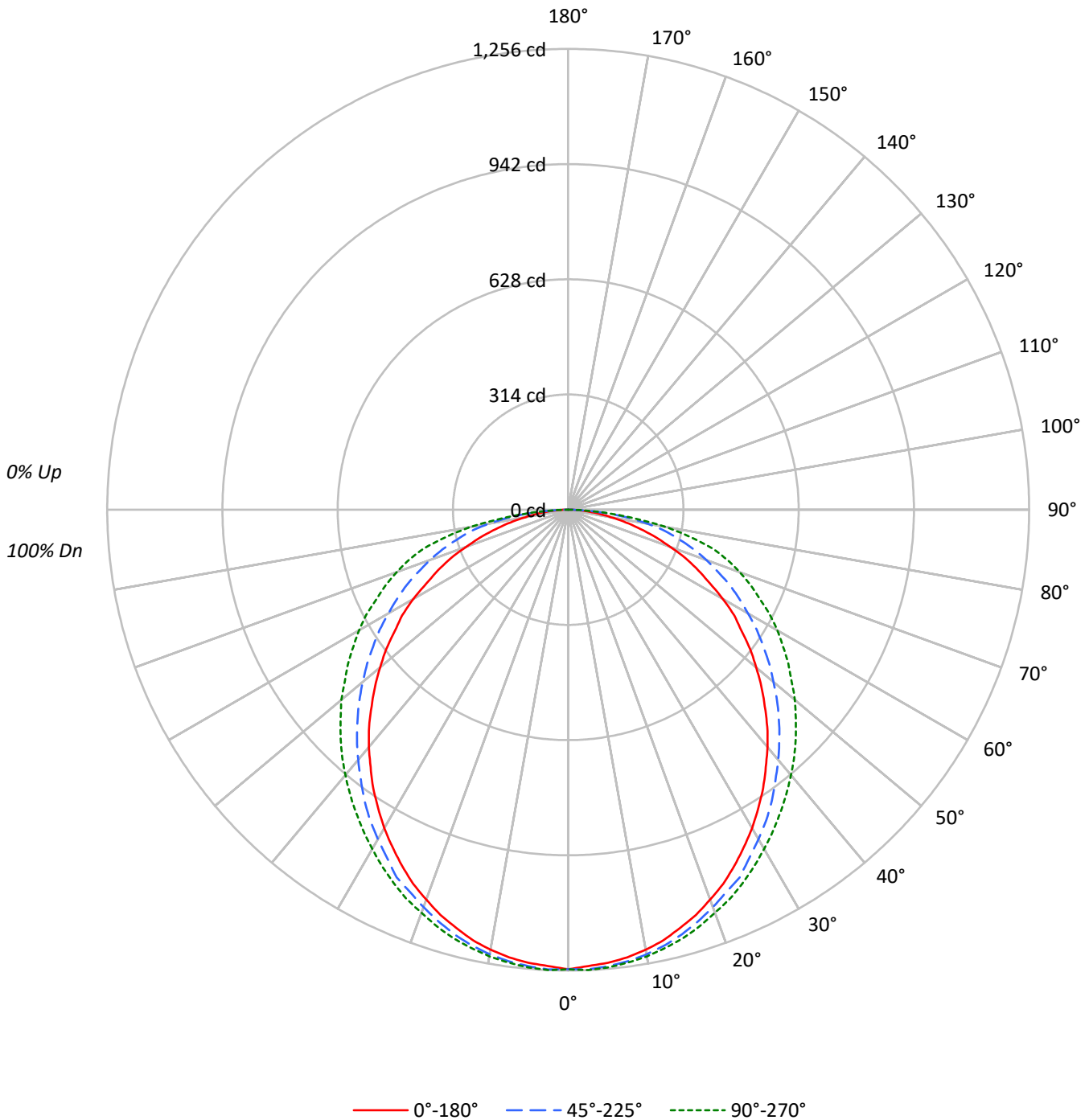
Input Watts (W): 35
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P272001

CATALOG NUMBER: 22CZ2-44HE-UNV-L930-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P272001

CATALOG NUMBER: 22CZ2-44HE-UNV-L930-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°	3370	3370	3370
5°	3348	3373	3383
10°	3328	3363	3377
15°	3287	3338	3368
20°	3239	3301	3348
25°	3180	3282	3336
30°	3114	3221	3317
35°	3042	3179	3310
40°	2967	3126	3317
45°	2883	3090	3338
50°	2800	3058	3376
55°	2704	3044	3435
60°	2624	3043	3541
65°	2493	3093	3670
70°	2324	3151	3907
75°	2129	3260	4221
80°	1853	3398	4156
85°	1624	3023	3301



TEST NUMBER: P272001

CATALOG NUMBER: 22CZ2-44HE-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.4	3.2
10°-20°	337.3	9.2
20°-30°	506.4	13.7
30°-40°	605.1	16.4
40°-50°	629.2	17.1
50°-60°	583.2	15.8
60°-70°	478.4	13.0
70°-80°	323.4	8.8
80°-90°	101.6	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°	962.2	26.1
0°-40°	1567.3	42.6
0°-60°	2779.7	75.5
0°-90°	3683.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3683.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1252	1252	1252	1252	1252	
5°	1240	1241	1249	1250	1252	118
15°	1180	1185	1198	1205	1209	333
25°	1071	1080	1106	1118	1124	493
35°	926	939	968	997	1008	579
45°	758	772	812	859	877	585
55°	576	594	649	707	732	518
65°	392	413	486	549	576	387
75°	205	239	314	377	406	217
85°	53	72	98	109	107	60
90°	0	0	0	0	0	



TEST NUMBER: P272001

CATALOG NUMBER: 22CZ2-44HE-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1252.3	1252.3	1252.3	1252.3	1252.3
2.5°	1245.1	1248.7	1254.1	1255.9	1255.9
5°	1239.6	1241.4	1248.7	1250.5	1252.3
7.5°	1230.6	1234.2	1241.4	1243.3	1245.1
10°	1217.9	1221.5	1230.6	1234.2	1236.0
12.5°	1201.6	1205.2	1216.1	1221.5	1223.3
15°	1179.8	1185.3	1198.0	1205.2	1208.8
17.5°	1158.1	1163.5	1176.2	1187.1	1190.7
20°	1130.9	1143.6	1152.6	1167.1	1169.0
22.5°	1103.7	1111.0	1127.3	1141.8	1149.0
25°	1071.1	1080.2	1105.5	1118.2	1123.6
27.5°	1036.7	1049.3	1069.3	1089.2	1096.5
30°	1002.2	1011.3	1036.7	1060.2	1067.5
32.5°	964.2	976.8	1004.0	1027.6	1038.5
35°	926.1	938.8	967.8	996.8	1007.7
37.5°	884.4	898.9	927.9	962.3	976.8
40°	844.5	855.4	889.9	931.5	944.2
42.5°	802.9	815.5	851.8	897.1	911.6
45°	757.6	772.1	811.9	859.0	877.2
47.5°	714.1	728.6	772.1	819.2	840.9
50°	668.8	686.9	730.4	784.7	806.5
52.5°	625.3	641.6	690.5	746.7	766.6
55°	576.3	594.4	648.8	706.8	732.2
57.5°	536.5	549.1	608.9	668.8	694.1
60°	487.5	503.8	565.4	628.9	657.9
62.5°	435.0	462.1	525.6	590.8	619.8
65°	391.5	413.2	485.7	549.1	576.3
67.5°	346.2	369.7	440.4	507.5	538.3
70°	295.4	326.2	400.5	467.6	496.6
72.5°	250.1	282.7	358.8	424.1	454.9
75°	204.8	239.2	313.5	377.0	406.0
77.5°	161.3	199.4	271.8	320.8	338.9
80°	119.6	155.9	219.3	253.7	268.2
82.5°	83.4	114.2	161.3	179.4	183.0
85°	52.6	72.5	97.9	108.7	106.9
87.5°	23.6	29.0	36.2	39.9	38.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)