

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: P259431

Luminaire Tested: **22CZ-LD5-44-S-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259431
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25712)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-44-S-UNV-L93050-W2A1-U-3000K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3506.0 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

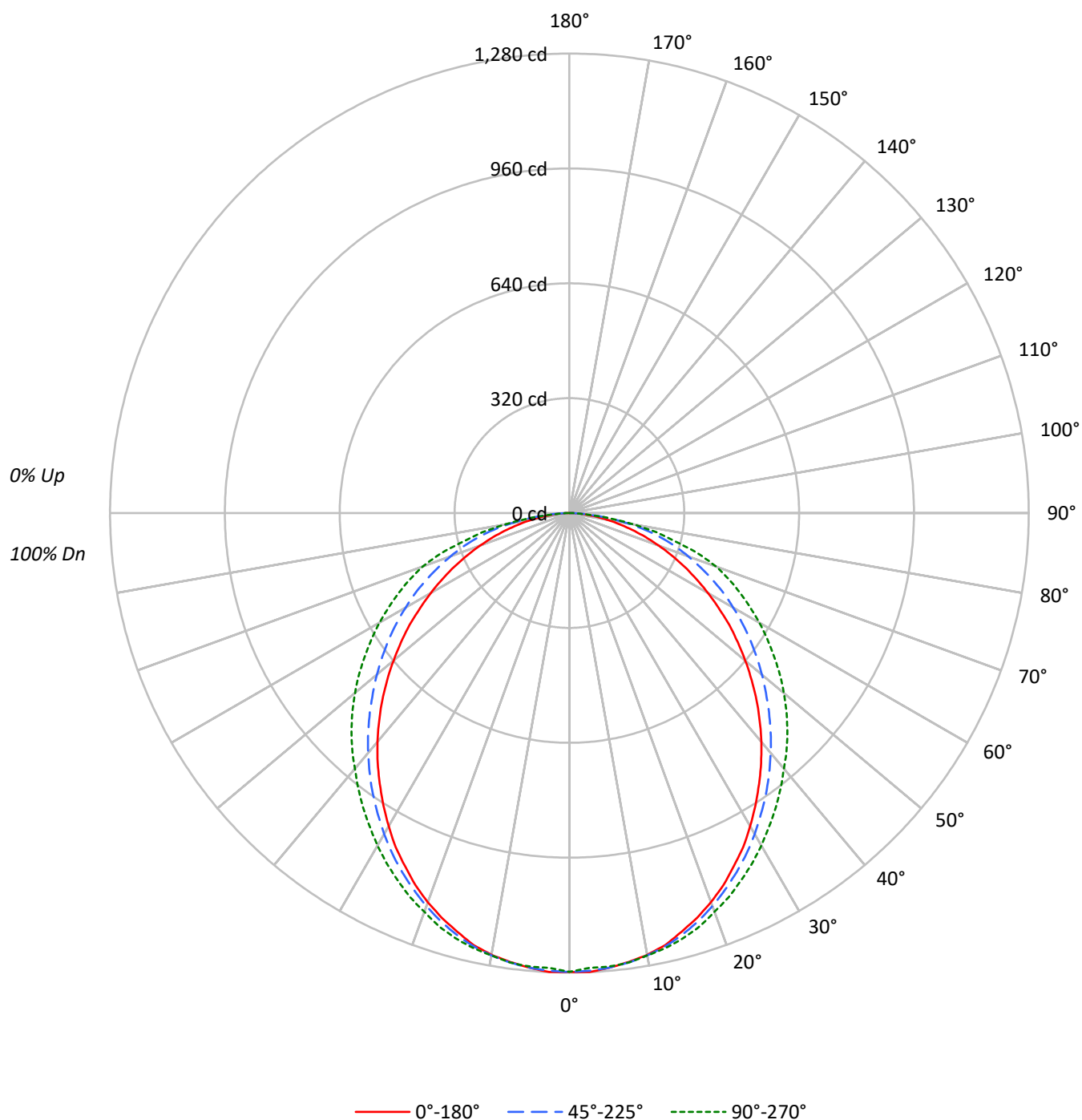
Input Watts (W): 35.391708
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83		
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69		
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	64	60	58		
4	82	70	61	54	80	69	61	54	66	59	53	64	58	53	62	56	52	50		
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43		
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38		
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33		
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30		
9	56	43	35	29	55	42	34	29	41	34	29	40	34	29	39	33	29	27		
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3439	3439	3439
5°	3434	3434	3425
10°	3414	3419	3419
15°	3364	3387	3415
20°	3303	3337	3385
25°	3220	3275	3355
30°	3129	3208	3323
35°	3026	3137	3292
40°	2922	3064	3266
45°	2807	2993	3268
50°	2679	2933	3264
55°	2552	2884	3263
60°	2402	2837	3290
65°	2252	2798	3335
70°	2080	2769	3419
75°	1874	2749	3169
80°	1644	2557	2766
85°	1352	1924	1717



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.7	3.4
10°-20°	342.9	9.8
20°-30°	509.3	14.5
30°-40°	599.4	17.1
40°-50°	611.1	17.4
50°-60°	551.2	15.7
60°-70°	434.1	12.4
70°-80°	267.8	7.6
80°-90°	69.5	2.0
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°	972.8	27.7
0°-40°	1572.3	44.8
0°-60°	2734.6	78.0
0°-90°	3506.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3506.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1278	1278	1278	1278	1278	
5°	1271	1273	1271	1270	1268	121
15°	1207	1212	1216	1223	1226	340
25°	1084	1091	1103	1122	1130	500
35°	921	931	955	985	1002	576
45°	738	749	786	834	859	569
55°	544	562	615	670	696	485
65°	354	379	440	495	524	350
75°	180	210	264	295	305	192
85°	44	56	62	59	56	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1278.1	1278.1	1278.1	1278.1	1278.1
2.5°	1279.8	1279.8	1276.5	1273.1	1268.0
5°	1271.4	1273.1	1271.4	1269.7	1268.0
7.5°	1261.3	1263.0	1263.0	1263.0	1263.0
10°	1249.5	1251.2	1251.2	1251.2	1251.2
12.5°	1232.7	1234.4	1236.0	1237.7	1241.1
15°	1207.4	1212.5	1215.8	1222.6	1225.9
17.5°	1182.2	1187.2	1192.3	1200.7	1207.4
20°	1153.5	1156.9	1165.3	1175.4	1182.2
22.5°	1121.5	1126.6	1135.0	1148.5	1158.6
25°	1084.5	1091.2	1103.0	1121.5	1130.0
27.5°	1049.1	1054.2	1069.3	1089.5	1101.3
30°	1007.0	1013.8	1032.3	1057.5	1069.3
32.5°	964.9	973.3	993.6	1022.2	1035.7
35°	921.1	931.2	954.8	985.1	1002.0
37.5°	877.4	887.5	914.4	948.1	966.6
40°	831.9	842.0	872.3	909.4	929.6
42.5°	784.7	796.5	830.2	872.3	895.9
45°	737.6	749.4	786.4	833.6	858.8
47.5°	688.7	702.2	742.6	794.8	820.1
50°	639.9	655.1	700.5	754.4	779.7
52.5°	591.1	607.9	656.8	712.3	739.3
55°	543.9	562.5	614.7	670.2	695.5
57.5°	493.4	515.3	570.9	624.8	653.4
60°	446.3	469.8	527.1	581.0	611.3
62.5°	399.1	424.4	485.0	538.9	567.5
65°	353.6	378.9	439.5	495.1	523.7
67.5°	308.2	336.8	395.7	451.3	479.9
70°	264.4	294.7	352.0	405.8	434.5
72.5°	222.3	252.6	309.9	360.4	377.2
75°	180.2	210.5	264.4	294.7	304.8
77.5°	141.5	170.1	217.2	235.8	249.2
80°	106.1	131.4	165.0	176.8	178.5
82.5°	72.4	94.3	114.5	116.2	114.5
85°	43.8	55.6	62.3	58.9	55.6
87.5°	20.2	21.9	20.2	13.5	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)