

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: P277375

Luminaire Tested: **22CZ2-44HE-S-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277375
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: 22CZ2-44HE-S-UNV-L93050-W2A1-U-3000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3378.0 lumens
Efficiency: N/A
Efficacy: 95.4 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

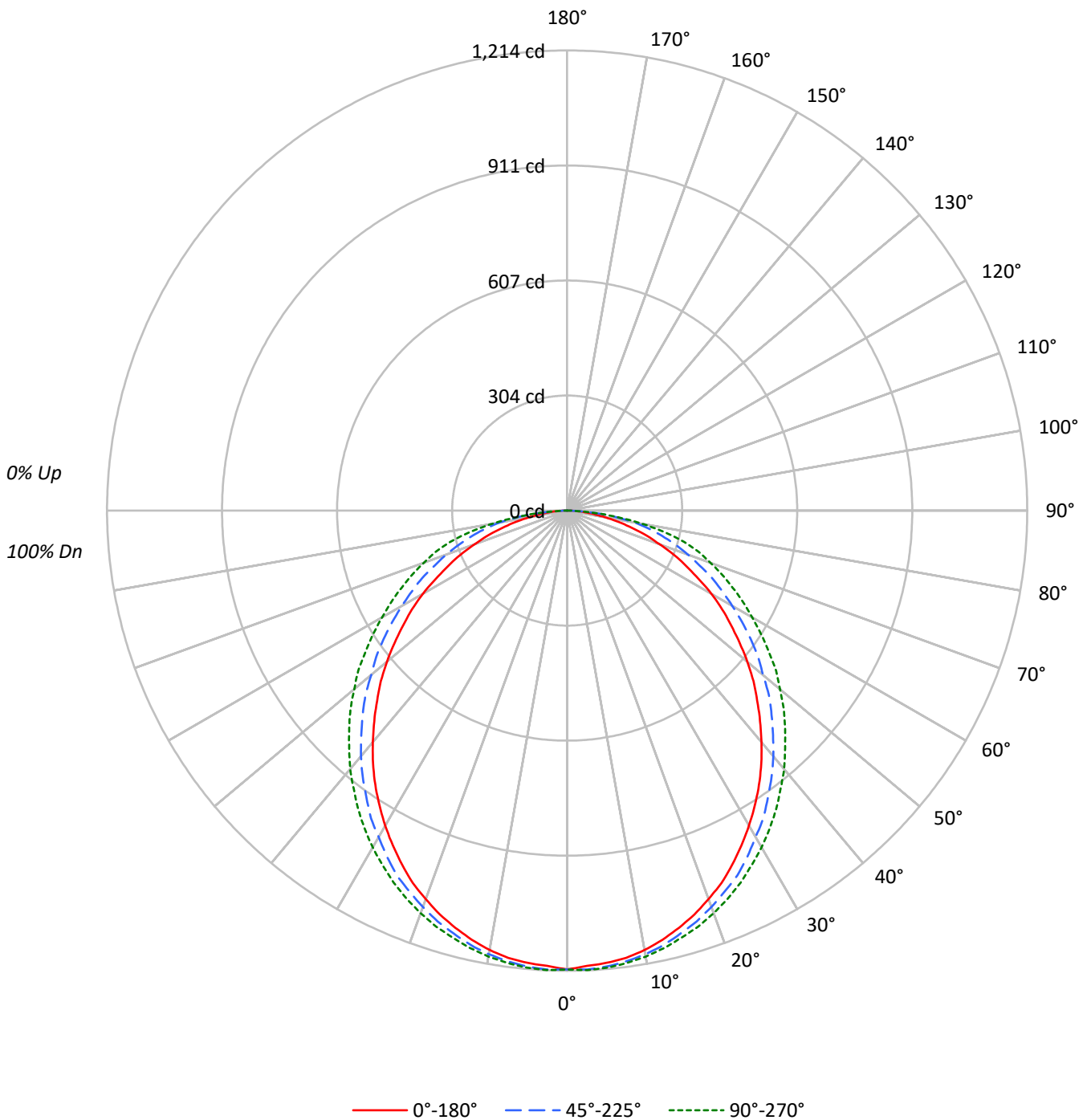
Input Watts (W): 35.391708
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	3257	3257	3257
5°	3236	3261	3270
10°	3217	3247	3265
15°	3175	3219	3249
20°	3123	3186	3236
25°	3061	3154	3215
30°	2982	3090	3188
35°	2899	3034	3158
40°	2801	2973	3128
45°	2699	2903	3095
50°	2600	2824	3068
55°	2477	2773	3047
60°	2366	2706	3037
65°	2208	2690	3071
70°	2034	2666	3162
75°	1835	2704	3326
80°	1587	2785	3126
85°	1315	2337	2337



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.5	3.4
10°-20°	325.8	9.6
20°-30°	487.4	14.4
30°-40°	577.2	17.1
40°-50°	588.3	17.4
50°-60°	527.2	15.6
60°-70°	412.8	12.2
70°-80°	266.2	7.9
80°-90°	78.6	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°	927.6	27.5
0°-40°	1504.9	44.5
0°-60°	2620.4	77.6
0°-90°	3378.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3378.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1210	1210	1210	1210	1210	
5°	1198	1201	1207	1209	1210	114
15°	1140	1146	1155	1165	1166	321
25°	1031	1040	1062	1076	1083	474
35°	883	894	924	952	961	552
45°	709	725	763	802	813	548
55°	528	545	591	632	649	473
65°	347	367	422	463	482	344
75°	176	203	260	304	320	189
85°	43	58	76	76	76	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1210.4	1210.4	1210.4	1210.4	1210.4
2.5°	1202.6	1205.7	1212.0	1213.6	1213.6
5°	1197.8	1201.0	1207.3	1208.9	1210.4
7.5°	1190.0	1191.5	1199.4	1202.6	1204.1
10°	1177.3	1180.5	1188.4	1193.1	1194.7
12.5°	1160.0	1164.7	1174.2	1180.5	1182.1
15°	1139.5	1145.8	1155.3	1164.7	1166.3
17.5°	1117.5	1123.8	1136.4	1147.4	1150.6
20°	1090.7	1098.5	1112.7	1125.3	1130.1
22.5°	1063.9	1070.2	1087.5	1103.3	1108.0
25°	1030.8	1040.2	1062.3	1076.5	1082.8
27.5°	996.1	1007.1	1029.2	1048.1	1054.4
30°	959.8	970.9	994.5	1018.2	1026.0
32.5°	922.0	934.6	963.0	986.6	994.5
35°	882.6	893.6	923.6	952.0	961.4
37.5°	841.6	851.1	885.8	915.7	925.2
40°	797.5	810.1	846.4	881.0	890.5
42.5°	753.4	767.6	803.8	841.6	851.1
45°	709.2	725.0	762.8	802.2	813.3
47.5°	666.7	679.3	721.9	759.7	775.4
50°	621.0	633.6	674.6	717.1	732.9
52.5°	573.7	591.0	635.2	676.1	695.1
55°	528.0	545.3	591.0	632.0	649.4
57.5°	485.4	499.6	546.9	589.5	606.8
60°	439.7	452.3	502.8	548.5	564.2
62.5°	390.9	409.8	461.8	504.4	523.3
65°	346.7	367.2	422.4	463.4	482.3
67.5°	305.8	324.7	378.3	422.4	442.9
70°	258.5	283.7	338.9	383.0	401.9
72.5°	220.7	242.7	299.5	343.6	364.1
75°	176.5	203.3	260.1	304.2	319.9
77.5°	140.3	167.1	220.7	255.3	263.2
80°	102.4	129.2	179.7	197.0	201.7
82.5°	69.3	94.6	129.2	134.0	135.5
85°	42.6	58.3	75.7	75.7	75.7
87.5°	20.5	23.6	26.8	25.2	25.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)