

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: P277482

Luminaire Tested: **22CZ2-44HE-S-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277482
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-L92765-W2A1-U-4000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3835.0 lumens
Efficiency: N/A
Efficacy: 109.7 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

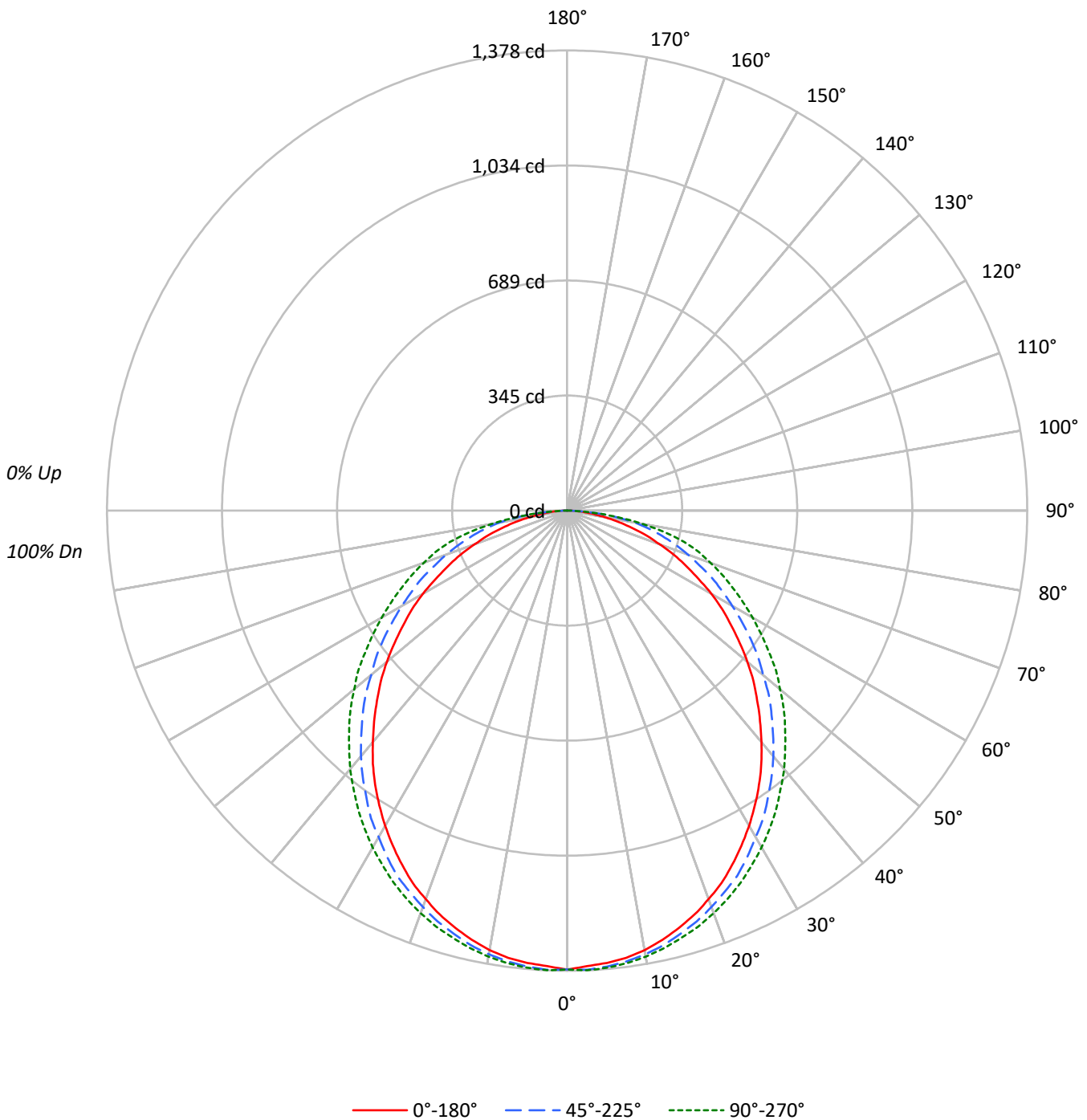
Input Watts (W): 34.968
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3698	3698	3698
5°	3673	3702	3712
10°	3652	3686	3706
15°	3604	3654	3689
20°	3546	3618	3674
25°	3475	3581	3650
30°	3386	3508	3619
35°	3292	3444	3586
40°	3181	3375	3551
45°	3064	3296	3514
50°	2951	3206	3483
55°	2812	3148	3459
60°	2687	3072	3448
65°	2507	3053	3486
70°	2308	3027	3590
75°	2084	3069	3776
80°	1802	3161	3549
85°	1491	2652	2652



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.0	3.4
10°-20°	369.8	9.6
20°-30°	553.4	14.4
30°-40°	655.3	17.1
40°-50°	667.9	17.4
50°-60°	598.6	15.6
60°-70°	468.6	12.2
70°-80°	302.2	7.9
80°-90°	89.3	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°	1053.1	27.5
0°-40°	1708.5	44.5
0°-60°	2974.9	77.6
0°-90°	3835.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3835.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1374	1374	1374	1374	1374	
5°	1360	1364	1371	1372	1374	129
15°	1294	1301	1312	1322	1324	365
25°	1170	1181	1206	1222	1229	539
35°	1002	1014	1048	1081	1092	626
45°	805	823	866	911	923	622
55°	599	619	671	718	737	537
65°	394	417	480	526	548	391
75°	200	231	295	345	363	215
85°	48	66	86	86	86	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1374.2	1374.2	1374.2	1374.2	1374.2
2.5°	1365.3	1368.8	1376.0	1377.8	1377.8
5°	1359.9	1363.5	1370.6	1372.4	1374.2
7.5°	1350.9	1352.7	1361.7	1365.3	1367.0
10°	1336.6	1340.2	1349.1	1354.5	1356.3
12.5°	1316.9	1322.3	1333.0	1340.2	1342.0
15°	1293.7	1300.8	1311.6	1322.3	1324.1
17.5°	1268.6	1275.8	1290.1	1302.6	1306.2
20°	1238.2	1247.2	1263.3	1277.6	1282.9
22.5°	1207.8	1215.0	1234.6	1252.5	1257.9
25°	1170.2	1181.0	1206.0	1222.1	1229.3
27.5°	1130.9	1143.4	1168.4	1189.9	1197.1
30°	1089.7	1102.2	1129.1	1155.9	1164.8
32.5°	1046.8	1061.1	1093.3	1120.1	1129.1
35°	1002.0	1014.5	1048.5	1080.8	1091.5
37.5°	955.5	966.2	1005.6	1039.6	1050.3
40°	905.4	919.7	960.9	1000.2	1011.0
42.5°	855.3	871.4	912.6	955.5	966.2
45°	805.2	823.1	866.0	910.8	923.3
47.5°	756.9	771.2	819.5	862.5	880.3
50°	705.0	719.3	765.8	814.1	832.0
52.5°	651.3	671.0	721.1	767.6	789.1
55°	599.4	619.1	671.0	717.5	737.2
57.5°	551.1	567.2	620.9	669.2	688.9
60°	499.2	513.5	570.8	622.7	640.6
62.5°	443.8	465.2	524.3	572.6	594.1
65°	393.7	416.9	479.5	526.1	547.5
67.5°	347.1	368.6	429.4	479.5	502.8
70°	293.4	322.1	384.7	434.8	456.3
72.5°	250.5	275.6	340.0	390.1	413.3
75°	200.4	230.8	295.2	345.3	363.2
77.5°	159.2	189.7	250.5	289.9	298.8
80°	116.3	146.7	204.0	223.7	229.0
82.5°	78.7	107.4	146.7	152.1	153.9
85°	48.3	66.2	85.9	85.9	85.9
87.5°	23.3	26.8	30.4	28.6	28.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)