

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: P277379

Luminaire Tested: **22CZ2-44HE-S-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277379
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-5000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4056.0 lumens
Efficiency: N/A
Efficacy: 112.5 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

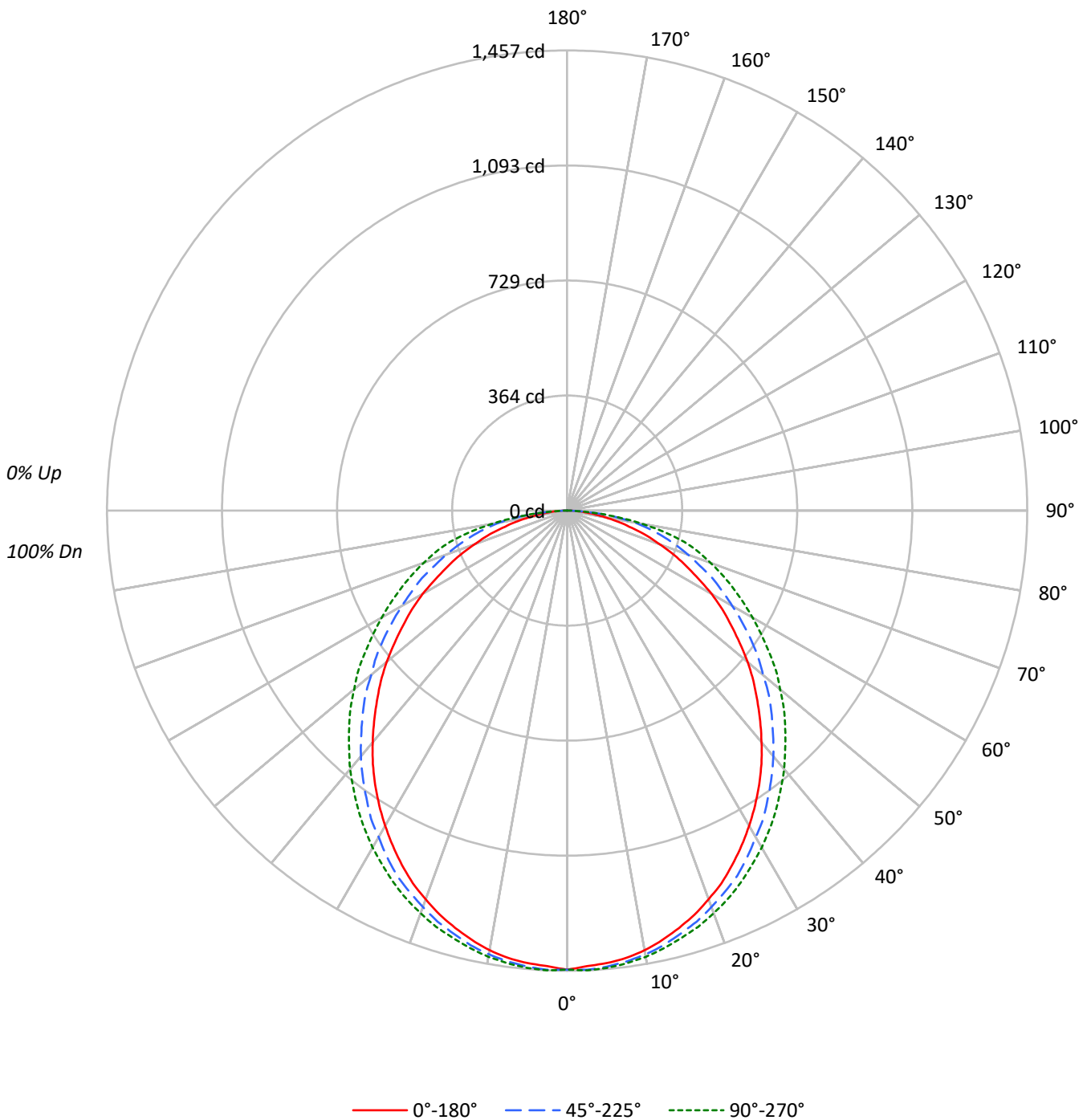
Input Watts (W): 36.049032
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3911	3911	3911
5°	3885	3916	3926
10°	3863	3899	3920
15°	3812	3865	3901
20°	3750	3826	3886
25°	3675	3787	3860
30°	3581	3710	3828
35°	3482	3643	3792
40°	3364	3570	3756
45°	3241	3486	3716
50°	3121	3391	3684
55°	2974	3330	3658
60°	2842	3249	3646
65°	2651	3230	3687
70°	2442	3201	3797
75°	2204	3247	3995
80°	1906	3343	3753
85°	1578	2803	2803



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.4	3.4
10°-20°	391.1	9.6
20°-30°	585.3	14.4
30°-40°	693.1	17.1
40°-50°	706.3	17.4
50°-60°	633.1	15.6
60°-70°	495.6	12.2
70°-80°	319.6	7.9
80°-90°	94.4	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°	1113.8	27.5
0°-40°	1806.9	44.5
0°-60°	3146.4	77.6
0°-90°	4056.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4056.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1453	1453	1453	1453	1453	
5°	1438	1442	1450	1452	1453	137
15°	1368	1376	1387	1398	1400	386
25°	1238	1249	1276	1292	1300	570
35°	1060	1073	1109	1143	1154	662
45°	852	870	916	963	976	658
55°	634	655	710	759	780	568
65°	416	441	507	556	579	414
75°	212	244	312	365	384	227
85°	51	70	91	91	91	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1453.4	1453.4	1453.4	1453.4	1453.4
2.5°	1443.9	1447.7	1455.3	1457.2	1457.2
5°	1438.3	1442.0	1449.6	1451.5	1453.4
7.5°	1428.8	1430.7	1440.1	1443.9	1445.8
10°	1413.7	1417.4	1426.9	1432.6	1434.5
12.5°	1392.8	1398.5	1409.9	1417.4	1419.3
15°	1368.2	1375.8	1387.2	1398.5	1400.4
17.5°	1341.7	1349.3	1364.4	1377.7	1381.5
20°	1309.6	1319.0	1336.1	1351.2	1356.9
22.5°	1277.4	1285.0	1305.8	1324.7	1330.4
25°	1237.7	1249.0	1275.5	1292.5	1300.1
27.5°	1196.0	1209.3	1235.8	1258.5	1266.0
30°	1152.5	1165.7	1194.1	1222.5	1232.0
32.5°	1107.1	1122.2	1156.3	1184.7	1194.1
35°	1059.8	1073.0	1109.0	1143.0	1154.4
37.5°	1010.6	1021.9	1063.5	1099.5	1110.9
40°	957.6	972.7	1016.2	1057.9	1069.2
42.5°	904.6	921.6	965.1	1010.6	1021.9
45°	851.6	870.5	915.9	963.3	976.5
47.5°	800.5	815.6	866.7	912.2	931.1
50°	745.6	760.8	810.0	861.1	880.0
52.5°	688.8	709.7	762.7	811.9	834.6
55°	634.0	654.8	709.7	758.9	779.7
57.5°	582.9	599.9	656.7	707.8	728.6
60°	528.0	543.1	603.7	658.6	677.5
62.5°	469.3	492.0	554.5	605.6	628.3
65°	416.3	440.9	507.2	556.4	579.1
67.5°	367.1	389.8	454.2	507.2	531.8
70°	310.4	340.6	406.9	459.9	482.6
72.5°	264.9	291.4	359.6	412.6	437.2
75°	212.0	244.1	312.3	365.2	384.2
77.5°	168.4	200.6	264.9	306.6	316.0
80°	123.0	155.2	215.7	236.6	242.2
82.5°	83.3	113.5	155.2	160.9	162.7
85°	51.1	70.0	90.8	90.8	90.8
87.5°	24.6	28.4	32.2	30.3	30.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)