

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: P259432

Luminaire Tested: **22CZ-LD5-44-S-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259432
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-3500K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3830.0 lumens
Efficiency: N/A
Efficacy: 108.6 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

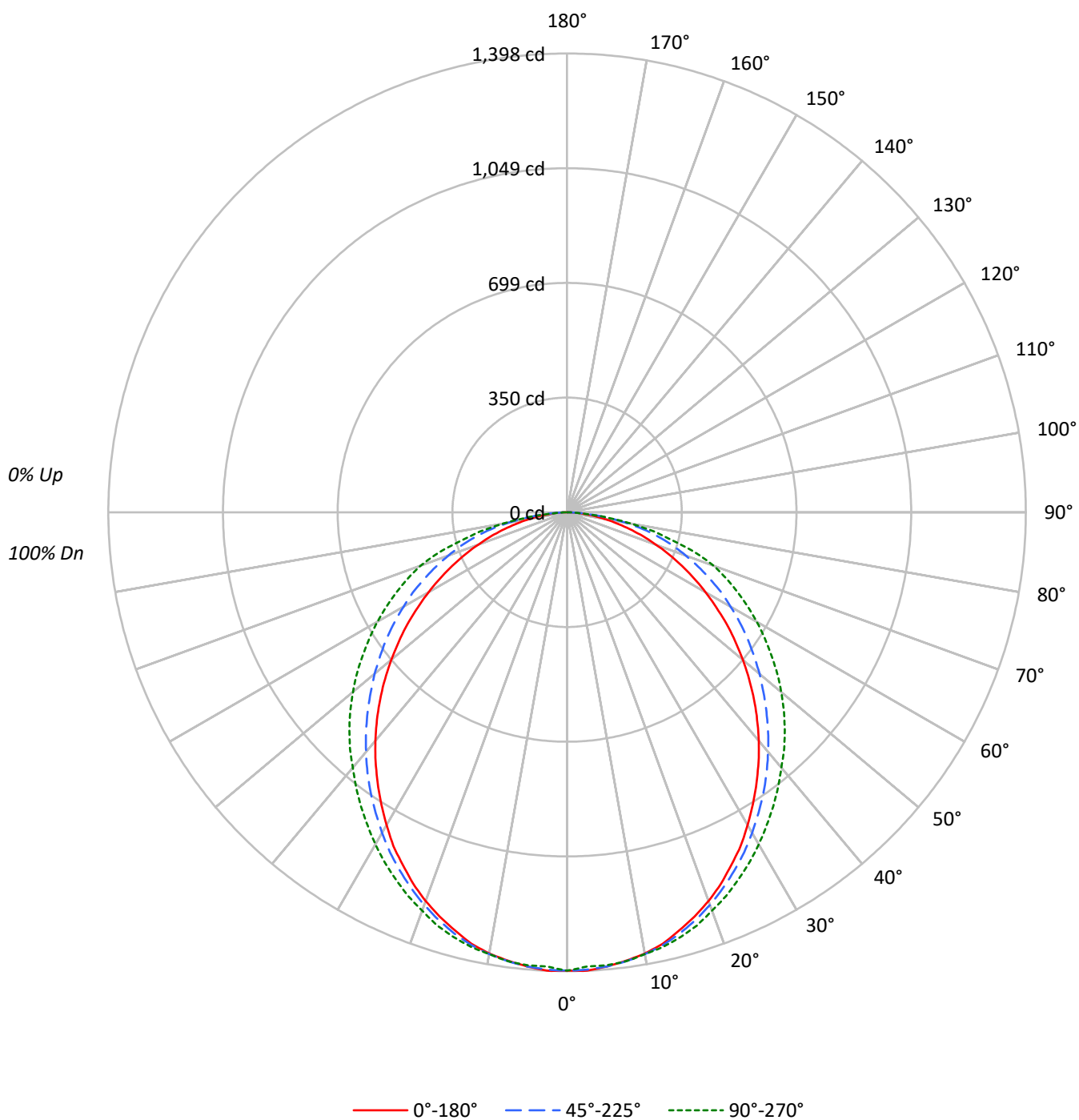
Input Watts (W): 35.253324
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3757	3757	3757
5°	3752	3752	3742
10°	3730	3735	3735
15°	3675	3700	3731
20°	3609	3645	3698
25°	3518	3578	3665
30°	3418	3504	3630
35°	3306	3427	3596
40°	3192	3347	3567
45°	3066	3269	3570
50°	2927	3204	3566
55°	2788	3150	3565
60°	2624	3099	3594
65°	2460	3057	3643
70°	2272	3025	3734
75°	2046	3003	3462
80°	1796	2794	3022
85°	1476	2103	1874



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.8	3.4
10°-20°	374.6	9.8
20°-30°	556.3	14.5
30°-40°	654.8	17.1
40°-50°	667.6	17.4
50°-60°	602.1	15.7
60°-70°	474.3	12.4
70°-80°	292.5	7.6
80°-90°	75.9	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°	1062.7	27.7
0°-40°	1717.6	44.8
0°-60°	2987.3	78.0
0°-90°	3830.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3830.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1396	1396	1396	1396	1396	
5°	1389	1391	1389	1387	1385	132
15°	1319	1324	1328	1336	1339	372
25°	1185	1192	1205	1225	1234	546
35°	1006	1017	1043	1076	1095	630
45°	806	819	859	911	938	621
55°	594	614	672	732	760	530
65°	386	414	480	541	572	383
75°	197	230	289	322	333	210
85°	48	61	68	64	61	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1396.3	1396.3	1396.3	1396.3	1396.3
2.5°	1398.1	1398.1	1394.4	1390.7	1385.2
5°	1388.9	1390.7	1388.9	1387.1	1385.2
7.5°	1377.9	1379.7	1379.7	1379.7	1379.7
10°	1365.0	1366.8	1366.8	1366.8	1366.8
12.5°	1346.6	1348.4	1350.3	1352.1	1355.8
15°	1319.0	1324.5	1328.2	1335.6	1339.2
17.5°	1291.4	1296.9	1302.4	1311.6	1319.0
20°	1260.1	1263.8	1273.0	1284.0	1291.4
22.5°	1225.2	1230.7	1239.9	1254.6	1265.6
25°	1184.7	1192.1	1204.9	1225.2	1234.4
27.5°	1146.1	1151.6	1168.2	1190.2	1203.1
30°	1100.1	1107.4	1127.7	1155.3	1168.2
32.5°	1054.1	1063.3	1085.4	1116.6	1131.4
35°	1006.3	1017.3	1043.1	1076.2	1094.6
37.5°	958.4	969.5	998.9	1035.7	1055.9
40°	908.8	919.8	952.9	993.4	1015.5
42.5°	857.3	870.1	906.9	952.9	978.7
45°	805.7	818.6	859.1	910.6	938.2
47.5°	752.4	767.1	811.3	868.3	895.9
50°	699.1	715.6	765.3	824.1	851.7
52.5°	645.7	664.1	717.4	778.2	807.6
55°	594.2	614.4	671.5	732.2	759.8
57.5°	539.0	562.9	623.6	682.5	713.8
60°	487.5	513.3	575.8	634.7	667.8
62.5°	436.0	463.6	529.8	588.7	619.9
65°	386.3	413.9	480.1	540.8	572.1
67.5°	336.6	367.9	432.3	493.0	524.3
70°	288.8	321.9	384.5	443.3	474.6
72.5°	242.8	275.9	338.5	393.7	412.1
75°	196.8	230.0	288.8	321.9	333.0
77.5°	154.5	185.8	237.3	257.5	272.3
80°	115.9	143.5	180.3	193.2	195.0
82.5°	79.1	103.0	125.1	126.9	125.1
85°	47.8	60.7	68.1	64.4	60.7
87.5°	22.1	23.9	22.1	14.7	9.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)