

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: P259433

Luminaire Tested: **22CZ-LD5-44-S-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259433
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-4000K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4137.0 lumens
Efficiency: N/A
Efficacy: 116.5 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

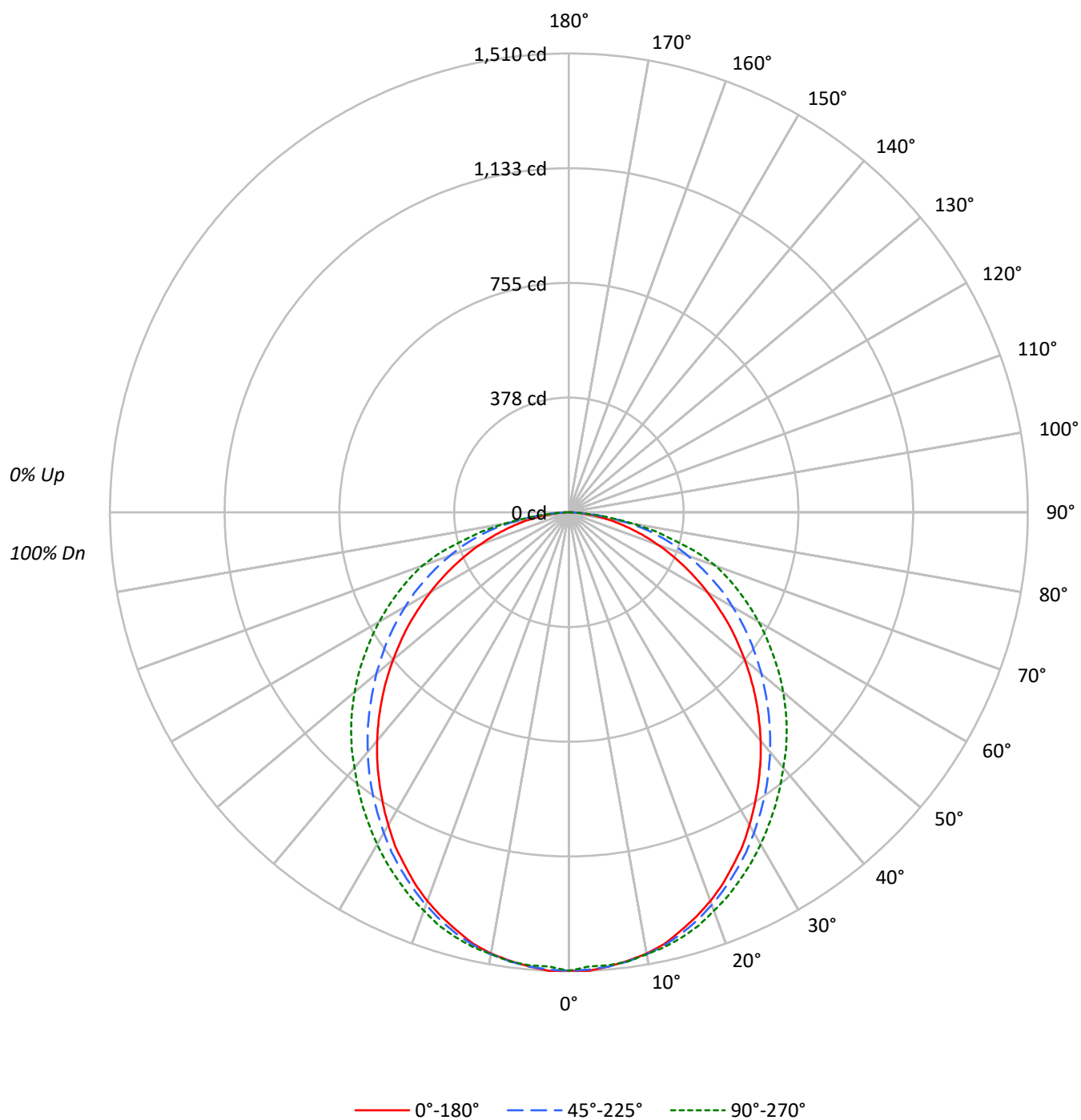
Input Watts (W): 35.495496
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4059	4059	4059
5°	4052	4052	4042
10°	4029	4034	4034
15°	3969	3997	4030
20°	3898	3938	3995
25°	3800	3864	3959
30°	3692	3785	3921
35°	3571	3701	3884
40°	3448	3616	3853
45°	3312	3532	3857
50°	3161	3460	3852
55°	3011	3403	3850
60°	2834	3348	3882
65°	2657	3302	3935
70°	2455	3268	4034
75°	2210	3244	3740
80°	1940	3017	3264
85°	1596	2269	2025



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.4	3.4
10°-20°	404.6	9.8
20°-30°	600.9	14.5
30°-40°	707.3	17.1
40°-50°	721.1	17.4
50°-60°	650.4	15.7
60°-70°	512.3	12.4
70°-80°	316.0	7.6
80°-90°	82.0	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°	1147.9	27.7
0°-40°	1855.2	44.8
0°-60°	3226.7	78.0
0°-90°	4137.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4137.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1508	1508	1508	1508	1508	
5°	1500	1502	1500	1498	1496	142
15°	1425	1431	1435	1443	1447	402
25°	1280	1288	1302	1323	1333	590
35°	1087	1099	1127	1162	1182	680
45°	870	884	928	984	1013	671
55°	642	664	725	791	821	573
65°	417	447	519	584	618	413
75°	213	248	312	348	360	227
85°	52	66	74	70	66	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1508.2	1508.2	1508.2	1508.2	1508.2
2.5°	1510.2	1510.2	1506.2	1502.2	1496.3
5°	1500.2	1502.2	1500.2	1498.2	1496.3
7.5°	1488.3	1490.3	1490.3	1490.3	1490.3
10°	1474.4	1476.4	1476.4	1476.4	1476.4
12.5°	1454.5	1456.5	1458.5	1460.5	1464.5
15°	1424.7	1430.7	1434.7	1442.6	1446.6
17.5°	1394.9	1400.9	1406.8	1416.8	1424.7
20°	1361.1	1365.1	1375.0	1387.0	1394.9
22.5°	1323.4	1329.3	1339.3	1355.2	1367.1
25°	1279.7	1287.6	1301.5	1323.4	1333.3
27.5°	1237.9	1243.9	1261.8	1285.6	1299.5
30°	1188.3	1196.2	1218.1	1247.9	1261.8
32.5°	1138.6	1148.5	1172.4	1206.1	1222.0
35°	1086.9	1098.8	1126.7	1162.4	1182.3
37.5°	1035.3	1047.2	1079.0	1118.7	1140.6
40°	981.6	993.5	1029.3	1073.0	1096.9
42.5°	926.0	939.9	979.6	1029.3	1057.1
45°	870.3	884.2	928.0	983.6	1013.4
47.5°	812.7	828.6	876.3	937.9	967.7
50°	755.1	773.0	826.6	890.2	920.0
52.5°	697.5	717.3	775.0	840.5	872.3
55°	641.8	663.7	725.3	790.9	820.7
57.5°	582.2	608.0	673.6	737.2	771.0
60°	526.6	554.4	622.0	685.5	721.3
62.5°	470.9	500.7	572.3	635.9	669.6
65°	417.3	447.1	518.6	584.2	618.0
67.5°	363.6	397.4	467.0	532.5	566.3
70°	312.0	347.7	415.3	478.9	512.7
72.5°	262.3	298.1	365.6	425.2	445.1
75°	212.6	248.4	312.0	347.7	359.7
77.5°	166.9	200.7	256.3	278.2	294.1
80°	125.2	155.0	194.7	208.6	210.6
82.5°	85.4	111.3	135.1	137.1	135.1
85°	51.7	65.6	73.5	69.5	65.6
87.5°	23.8	25.8	23.8	15.9	9.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)