

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: P258751

Luminaire Tested: **14CZ-LD5-35-S-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258751
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35112)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ-LD5-35-S-UNV-L93050-W2A1-U-4000K
Description: CRUZE 1x4 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: 3310.0 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

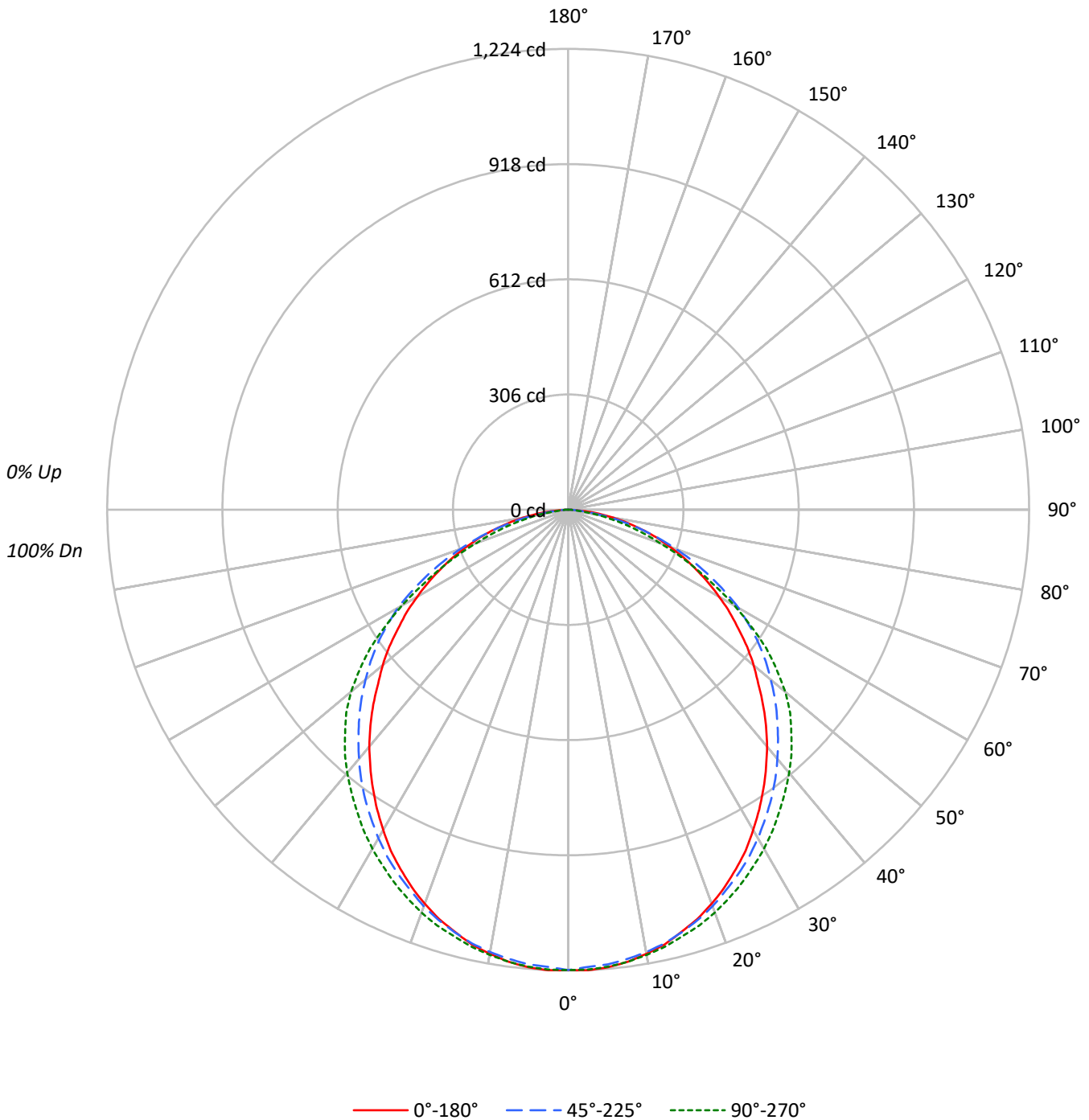
Input Watts (W): 28.179
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3290	3290	3290
5°	3295	3275	3291
10°	3272	3260	3281
15°	3234	3238	3267
20°	3189	3210	3261
25°	3127	3170	3245
30°	3052	3130	3231
35°	2970	3086	3212
40°	2886	3036	3207
45°	2784	2986	3188
50°	2692	2939	3149
55°	2588	2892	3010
60°	2492	2810	2746
65°	2385	2630	2414
70°	2251	2390	2043
75°	2101	2070	1686
80°	1852	1599	1234
85°	1457	775	682



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.5	3.5
10°-20°	329.1	9.9
20°-30°	494.0	14.9
30°-40°	588.9	17.8
40°-50°	606.6	18.3
50°-60°	540.6	16.3
60°-70°	389.5	11.8
70°-80°	203.7	6.2
80°-90°	42.1	1.3
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°	938.6	28.4
0°-40°	1527.5	46.1
0°-60°	2674.7	80.8
0°-90°	3310.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3310.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1223	1223	1223	1223	1223	
5°	1220	1217	1212	1220	1218	116
15°	1161	1162	1162	1174	1173	328
25°	1053	1059	1068	1088	1093	485
35°	904	916	940	970	978	565
45°	732	748	785	829	838	565
55°	552	569	616	644	642	495
65°	375	388	413	394	379	371
75°	202	212	199	173	162	214
85°	47	41	25	22	22	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1222.7	1222.7	1222.7	1222.7	1222.7
2.5°	1224.2	1221.2	1215.3	1222.7	1222.7
5°	1219.8	1216.8	1212.4	1219.8	1218.3
7.5°	1210.9	1208.0	1203.5	1212.4	1210.9
10°	1197.6	1196.2	1193.2	1202.1	1200.6
12.5°	1182.9	1181.4	1179.9	1188.8	1188.8
15°	1160.8	1162.2	1162.2	1174.0	1172.6
17.5°	1140.1	1141.6	1143.1	1157.8	1157.8
20°	1113.6	1115.0	1120.9	1137.2	1138.6
22.5°	1085.5	1087.0	1094.4	1113.6	1116.5
25°	1053.1	1059.0	1067.8	1088.5	1092.9
27.5°	1020.7	1025.1	1039.8	1063.4	1066.4
30°	982.3	991.2	1007.4	1033.9	1039.8
32.5°	944.0	954.3	973.5	1003.0	1010.3
35°	904.1	915.9	939.5	970.5	977.9
37.5°	862.8	873.2	902.7	935.1	945.4
40°	821.5	831.9	864.3	901.2	913.0
42.5°	777.3	792.0	824.5	865.8	877.6
45°	731.6	747.8	784.7	828.9	837.8
47.5°	684.4	702.1	744.8	789.1	799.4
50°	643.1	659.3	702.1	744.8	752.2
52.5°	598.8	613.6	660.8	696.2	697.6
55°	551.6	569.3	616.5	644.5	641.6
57.5°	508.9	523.6	569.3	584.1	575.2
60°	463.1	476.4	522.1	523.6	510.3
62.5°	418.9	432.2	467.6	457.2	441.0
65°	374.6	387.9	413.0	393.8	379.1
67.5°	331.9	343.7	358.4	333.3	318.6
70°	286.1	302.4	303.8	274.3	259.6
72.5°	246.3	255.2	252.2	224.2	210.9
75°	202.1	212.4	199.1	172.6	162.2
77.5°	160.8	168.1	150.4	125.4	118.0
80°	119.5	123.9	103.2	84.1	79.6
82.5°	81.1	81.1	59.0	45.7	41.3
85°	47.2	41.3	25.1	22.1	22.1
87.5°	16.2	10.3	10.3	10.3	10.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)