

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: P261102

Luminaire Tested: **24CZ-LD5-35SE-S-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261102  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-35SE-S-UNV-L93050-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2822.7 lumens  
Efficiency: N/A  
Efficacy: 106.0 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

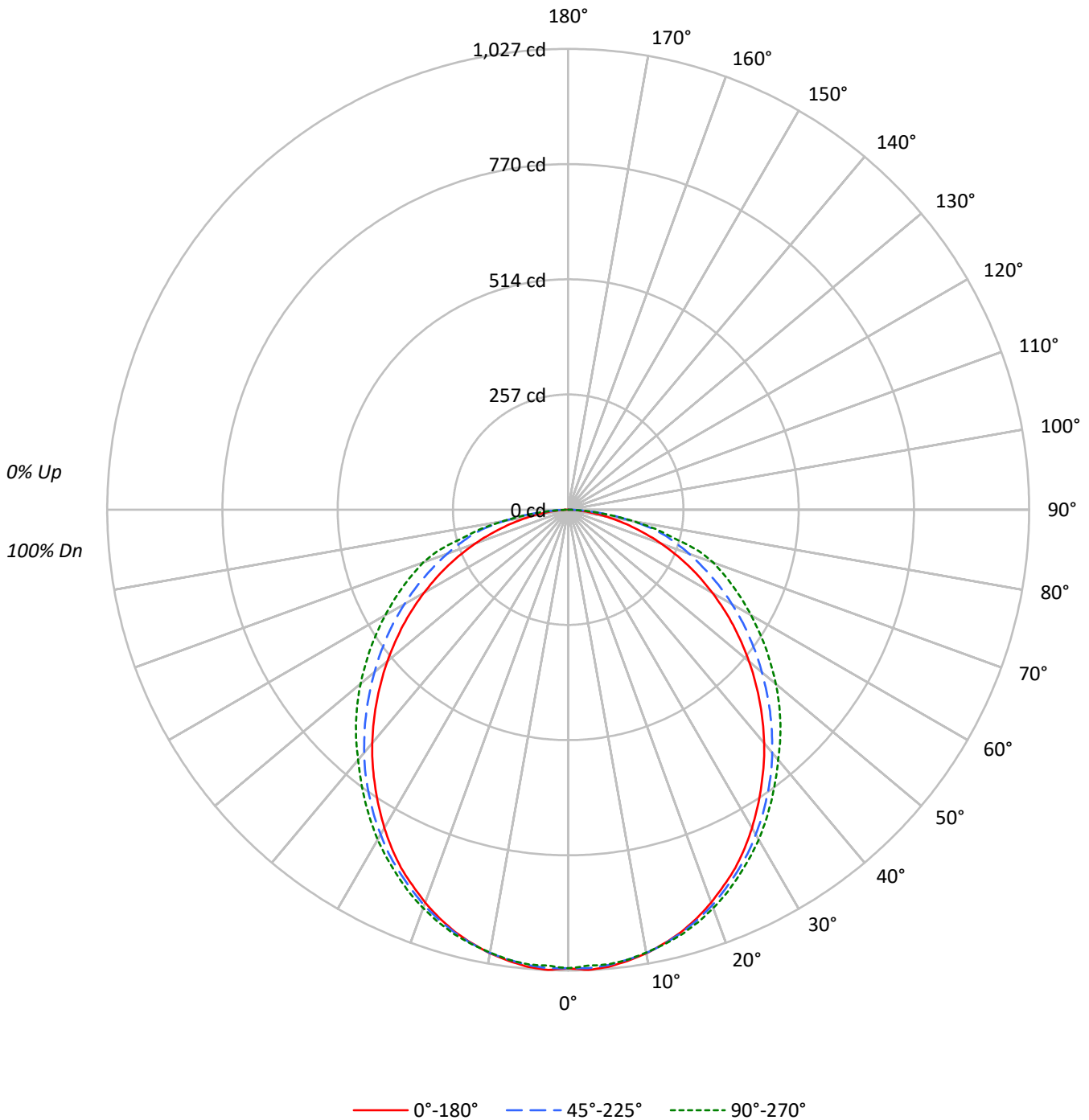
Input Watts (W): 26.63892  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1375	1375	1375
5°	1381	1376	1374
10°	1372	1370	1369
15°	1357	1359	1365
20°	1334	1343	1353
25°	1308	1322	1336
30°	1272	1299	1319
35°	1233	1271	1297
40°	1193	1242	1278
45°	1147	1210	1272
50°	1101	1180	1264
55°	1053	1154	1260
60°	998	1135	1266
65°	939	1121	1292
70°	865	1127	1352
75°	767	1167	1260
80°	641	1106	1135
85°	479	885	812



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.6	3.4
10°-20°	274.8	9.7
20°-30°	409.5	14.5
30°-40°	482.0	17.1
40°-50°	489.8	17.4
50°-60°	440.4	15.6
60°-70°	347.9	12.3
70°-80°	220.7	7.8
80°-90°	60.9	2.2
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°	780.9	27.7
0°-40°	1262.9	44.7
0°-60°	2193.1	77.7
0°-90°	2822.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2822.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1022	1022	1022	1022	1022	
5°	1023	1014	1019	1017	1017	97
15°	974	969	976	979	980	274
25°	881	880	890	896	900	405
35°	750	755	774	782	790	469
45°	603	611	636	655	669	465
55°	449	460	492	524	537	401
65°	295	310	352	391	406	292
75°	148	173	224	244	242	157
85°	31	54	57	53	53	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1021.9	1021.9	1021.9	1021.9	1021.9
2.5°	1026.6	1019.0	1022.8	1020.9	1017.2
5°	1022.8	1014.4	1019.0	1017.2	1017.2
7.5°	1014.4	1007.8	1011.5	1010.6	1011.5
10°	1004.0	997.4	1003.1	1003.1	1002.1
12.5°	989.9	984.3	990.9	990.9	991.8
15°	974.0	969.3	975.8	978.7	979.6
17.5°	954.2	949.5	958.0	960.8	963.6
20°	931.7	929.8	938.3	941.1	944.9
22.5°	906.3	906.3	914.8	918.6	924.2
25°	881.0	880.0	890.4	896.0	899.8
27.5°	850.9	851.9	865.0	870.7	875.3
30°	819.0	820.9	835.9	842.5	849.1
32.5°	785.2	788.9	805.8	813.4	819.9
35°	750.4	755.1	773.9	782.4	789.9
37.5°	715.7	722.3	742.0	750.4	758.9
40°	679.1	684.7	707.2	717.6	727.9
42.5°	641.5	649.0	671.5	686.6	698.8
45°	603.0	611.4	635.8	654.6	668.7
47.5°	564.5	575.7	599.2	624.6	636.8
50°	526.0	537.2	563.5	591.7	603.9
52.5°	486.5	497.8	527.8	557.0	570.1
55°	448.9	460.2	492.1	524.1	537.2
57.5°	409.5	421.7	457.4	490.3	503.4
60°	371.0	383.2	421.7	456.5	470.5
62.5°	333.4	346.6	387.0	423.6	437.7
65°	294.9	309.9	352.2	390.7	405.7
67.5°	257.3	274.3	318.4	358.8	374.7
70°	219.8	239.5	286.5	327.8	343.8
72.5°	183.1	204.7	254.5	295.9	304.3
75°	147.5	172.8	224.5	244.2	242.3
77.5°	113.6	141.8	190.7	194.4	200.1
80°	82.7	113.6	142.8	150.3	146.5
82.5°	54.5	85.5	102.4	98.6	97.7
85°	31.0	53.5	57.3	52.6	52.6
87.5°	13.1	21.6	18.8	14.1	13.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)