

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: P276832

Luminaire Tested: **24CZ2-55HE-RDP-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276832  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-55HE-RDP-UNV-L93050-W2A1-U-3000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2747.2 lumens  
Efficiency: N/A  
Efficacy: 67.0 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

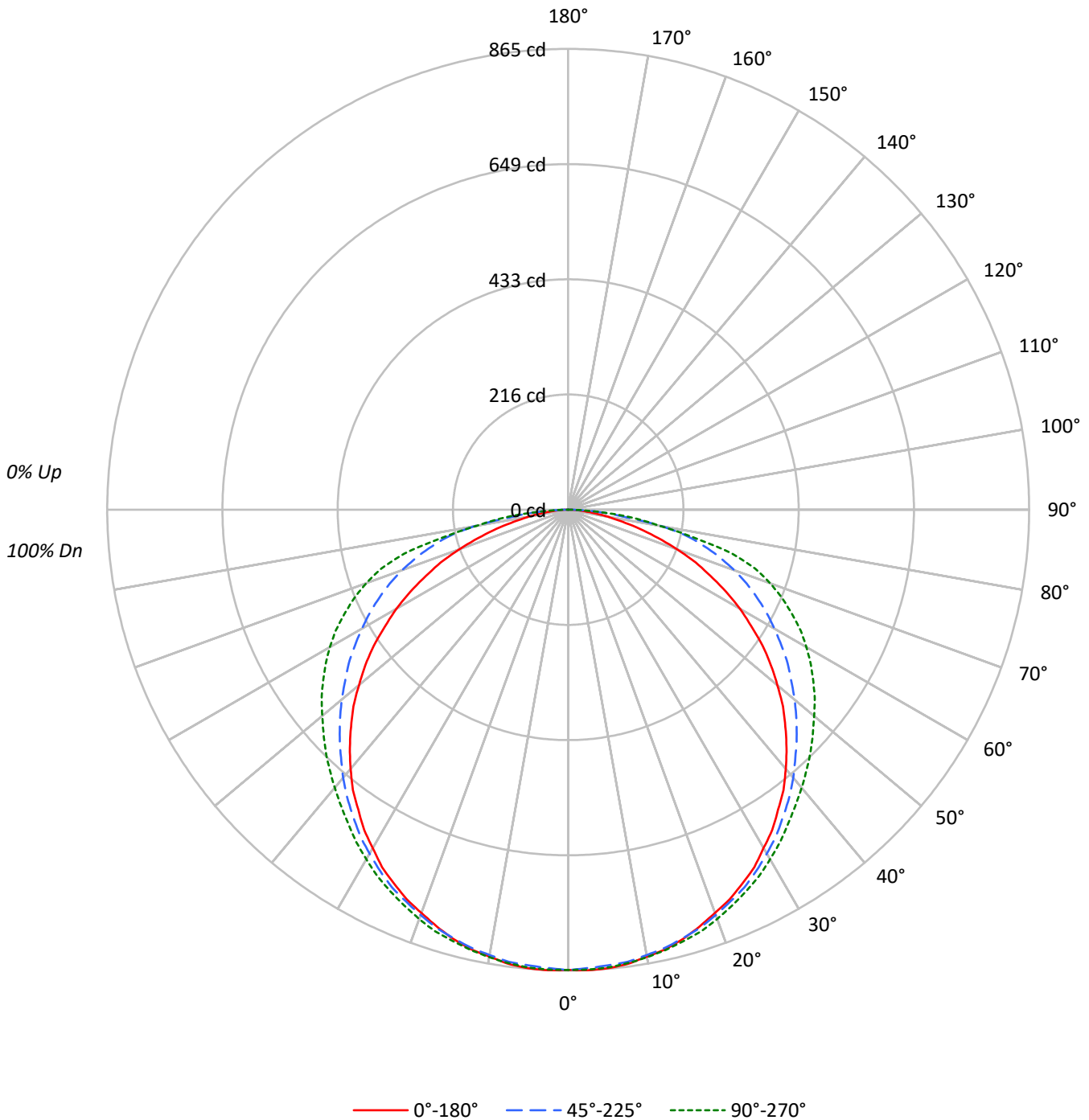
Input Watts (W): 41.004909  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	1162	1162	1162
5°	1167	1160	1165
10°	1164	1160	1165
15°	1162	1160	1167
20°	1153	1159	1171
25°	1149	1161	1173
30°	1139	1158	1177
35°	1128	1155	1182
40°	1115	1154	1197
45°	1097	1154	1224
50°	1073	1161	1261
55°	1045	1179	1317
60°	1001	1203	1390
65°	937	1245	1475
70°	852	1303	1587
75°	723	1375	1658
80°	570	1383	1341
85°	421	1051	1178



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.0	3.0
10°-20°	235.9	8.6
20°-30°	360.7	13.1
30°-40°	440.9	16.0
40°-50°	469.9	17.1
50°-60°	449.3	16.4
60°-70°	380.6	13.9
70°-80°	255.8	9.3
80°-90°	72.2	2.6
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°	678.5	24.7
0°-40°	1119.4	40.7
0°-60°	2038.6	74.2
0°-90°	2747.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2747.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	864	864	864	864	864	
5°	864	863	858	863	863	82
15°	834	834	833	839	838	235
25°	774	777	782	789	790	357
35°	687	692	703	717	720	430
45°	576	586	606	632	643	445
55°	446	462	503	542	561	397
65°	294	324	391	443	463	292
75°	139	189	264	309	319	149
85°	27	56	68	74	76	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	863.9	863.9	863.9	863.9	863.9
2.5°	865.3	865.3	861.2	863.9	863.9
5°	863.9	862.6	858.5	862.6	862.6
7.5°	859.8	858.5	855.8	859.8	858.5
10°	851.7	851.7	848.9	853.0	853.0
12.5°	844.9	843.5	842.1	847.6	846.2
15°	834.0	834.0	832.6	839.4	838.0
17.5°	820.3	821.7	823.0	828.5	829.9
20°	805.3	808.1	809.4	817.6	817.6
22.5°	791.7	793.1	795.8	804.0	804.0
25°	774.0	776.7	782.2	789.0	790.3
27.5°	756.3	757.6	764.5	774.0	775.4
30°	733.1	737.2	745.4	756.3	757.6
32.5°	712.7	716.8	726.3	737.2	739.9
35°	686.8	692.2	703.1	716.8	719.5
37.5°	663.6	667.7	681.3	696.3	700.4
40°	635.0	643.2	656.8	674.5	681.3
42.5°	606.4	614.6	630.9	654.1	662.3
45°	576.4	585.9	606.4	632.3	643.2
47.5°	546.4	557.3	580.5	610.5	622.7
50°	512.4	526.0	554.6	588.7	602.3
52.5°	479.7	496.0	527.4	565.5	583.2
55°	445.6	461.9	502.8	542.3	561.4
57.5°	407.4	429.2	474.2	519.2	539.6
60°	372.0	392.4	447.0	496.0	516.4
62.5°	333.9	361.1	419.7	471.5	491.9
65°	294.3	324.3	391.1	442.9	463.3
67.5°	258.9	291.6	362.5	414.2	434.7
70°	216.7	257.5	331.1	382.9	403.3
72.5°	177.1	222.1	298.4	348.8	367.9
75°	139.0	189.4	264.4	309.3	318.9
77.5°	103.6	156.7	228.9	248.0	241.2
80°	73.6	125.4	178.5	169.0	173.1
82.5°	47.7	95.4	110.4	125.4	129.5
85°	27.3	55.9	68.1	73.6	76.3
87.5°	12.3	20.4	27.3	27.3	25.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)