

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: P263555

Luminaire Tested: **24CZ-LD5-40SE-RDP-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263555  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-40SE-RDP-UNV-L83050-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2982.0 lumens  
Efficiency: N/A  
Efficacy: 93.5 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

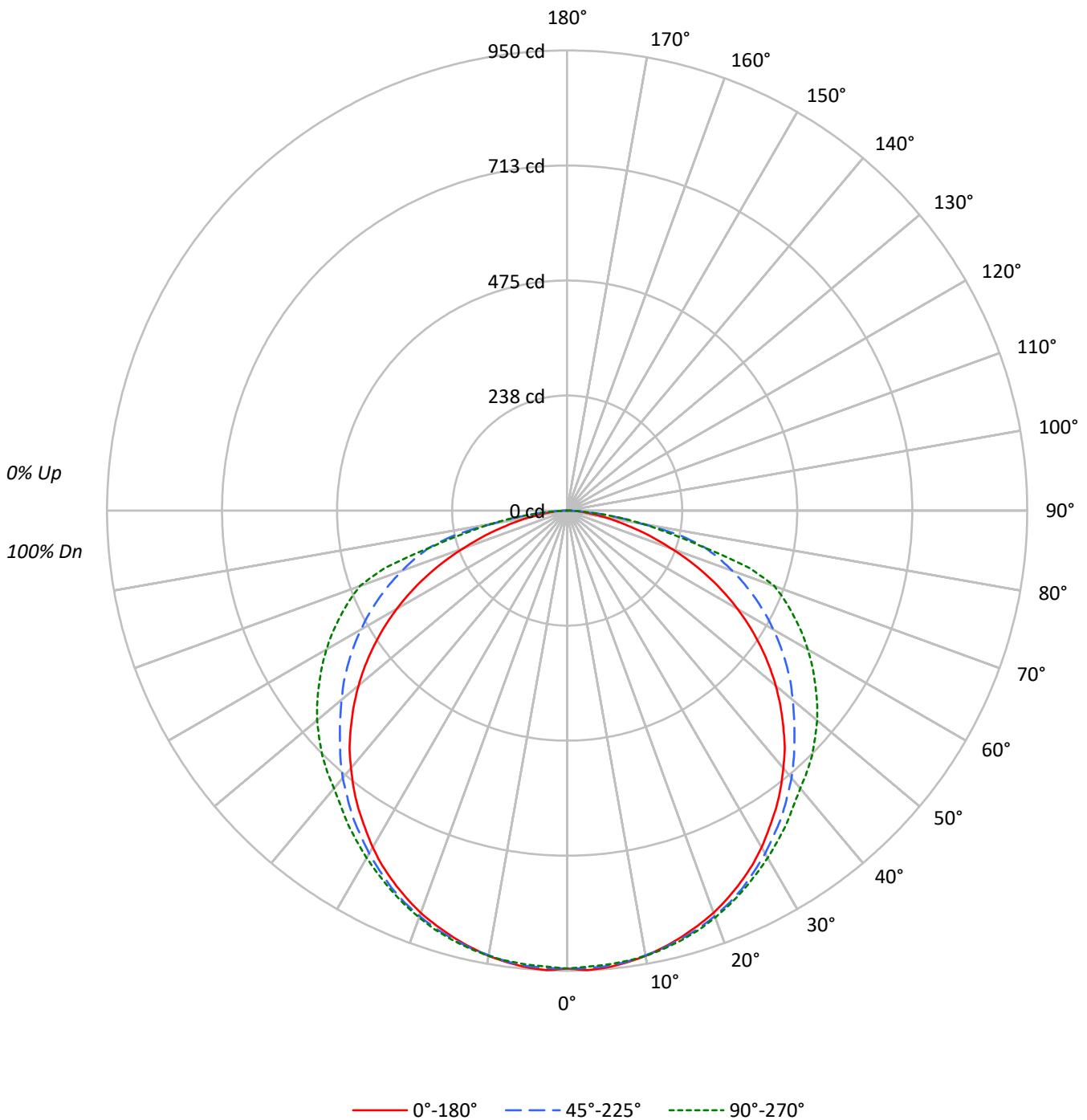
Input Watts (W): 31.901139  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	34	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27
9	55	41	33	27	53	41	32	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

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

	0°	45°	90°
0°	1272	1272	1272
5°	1279	1275	1271
10°	1276	1273	1276
15°	1270	1274	1278
20°	1265	1276	1280
25°	1257	1275	1281
30°	1247	1270	1286
35°	1235	1268	1297
40°	1219	1266	1315
45°	1201	1263	1360
50°	1177	1272	1410
55°	1143	1295	1467
60°	1094	1323	1544
65°	1019	1365	1645
70°	901	1426	1790
75°	755	1526	1503
80°	603	1206	1251
85°	475	815	747



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.7	3.0
10°-20°	258.0	8.7
20°-30°	394.1	13.2
30°-40°	481.8	16.2
40°-50°	515.8	17.3
50°-60°	494.7	16.6
60°-70°	417.7	14.0
70°-80°	267.0	9.0
80°-90°	63.1	2.1
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°	741.8	24.9
0°-40°	1223.7	41.0
0°-60°	2234.2	74.9
0°-90°	2982.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2982.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	945	945	945	945	945	
5°	947	941	944	942	941	90
15°	912	909	914	917	917	257
25°	847	846	859	862	863	390
35°	752	757	772	782	790	470
45°	631	642	664	694	715	487
55°	487	504	552	602	625	435
65°	320	351	429	489	517	316
75°	145	207	294	299	289	156
85°	31	51	53	51	48	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	945.3	945.3	945.3	945.3	945.3
2.5°	949.7	943.9	945.3	945.3	942.4
5°	946.8	940.9	943.9	942.4	940.9
7.5°	940.9	936.5	939.4	939.4	938.0
10°	933.6	929.2	932.1	933.6	933.6
12.5°	923.3	920.4	924.8	924.8	926.2
15°	911.6	908.6	914.5	917.4	917.4
17.5°	898.3	896.9	904.2	905.7	907.2
20°	883.7	882.2	891.0	891.0	893.9
22.5°	866.1	864.6	876.3	876.3	879.3
25°	847.0	845.5	858.7	861.6	863.1
27.5°	826.4	825.0	838.2	842.6	845.5
30°	802.9	802.9	817.6	823.5	827.9
32.5°	776.5	780.9	794.1	802.9	808.8
35°	751.6	757.4	772.1	782.4	789.7
37.5°	723.7	729.5	745.7	758.9	767.7
40°	694.3	701.6	720.7	735.4	748.6
42.5°	665.0	672.3	692.8	714.9	732.5
45°	631.2	641.5	663.5	694.3	714.9
47.5°	597.4	607.7	635.6	673.8	694.3
50°	562.2	573.9	607.7	651.7	673.8
52.5°	525.5	538.7	581.3	628.3	650.3
55°	487.3	503.5	551.9	601.8	625.3
57.5°	447.7	465.3	522.6	575.4	600.4
60°	406.6	428.6	491.7	547.5	573.9
62.5°	364.0	390.5	460.9	518.2	546.1
65°	320.0	350.8	428.6	488.8	516.7
67.5°	274.5	315.6	396.3	459.4	487.3
70°	229.0	277.4	362.6	427.2	455.0
72.5°	186.4	242.2	328.8	389.0	394.9
75°	145.3	207.0	293.6	299.4	289.2
77.5°	108.6	171.7	242.2	215.8	214.3
80°	77.8	138.0	155.6	160.0	161.5
82.5°	51.4	104.2	101.3	104.2	102.8
85°	30.8	51.4	52.8	51.4	48.4
87.5°	14.7	19.1	14.7	13.2	11.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)