

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: P263099

Luminaire Tested: **24CZ-LD5-55-SQP-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263099  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-55-SQP-UNV-L83050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SQP LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3858.0 lumens  
Efficiency: N/A  
Efficacy: 94.1 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

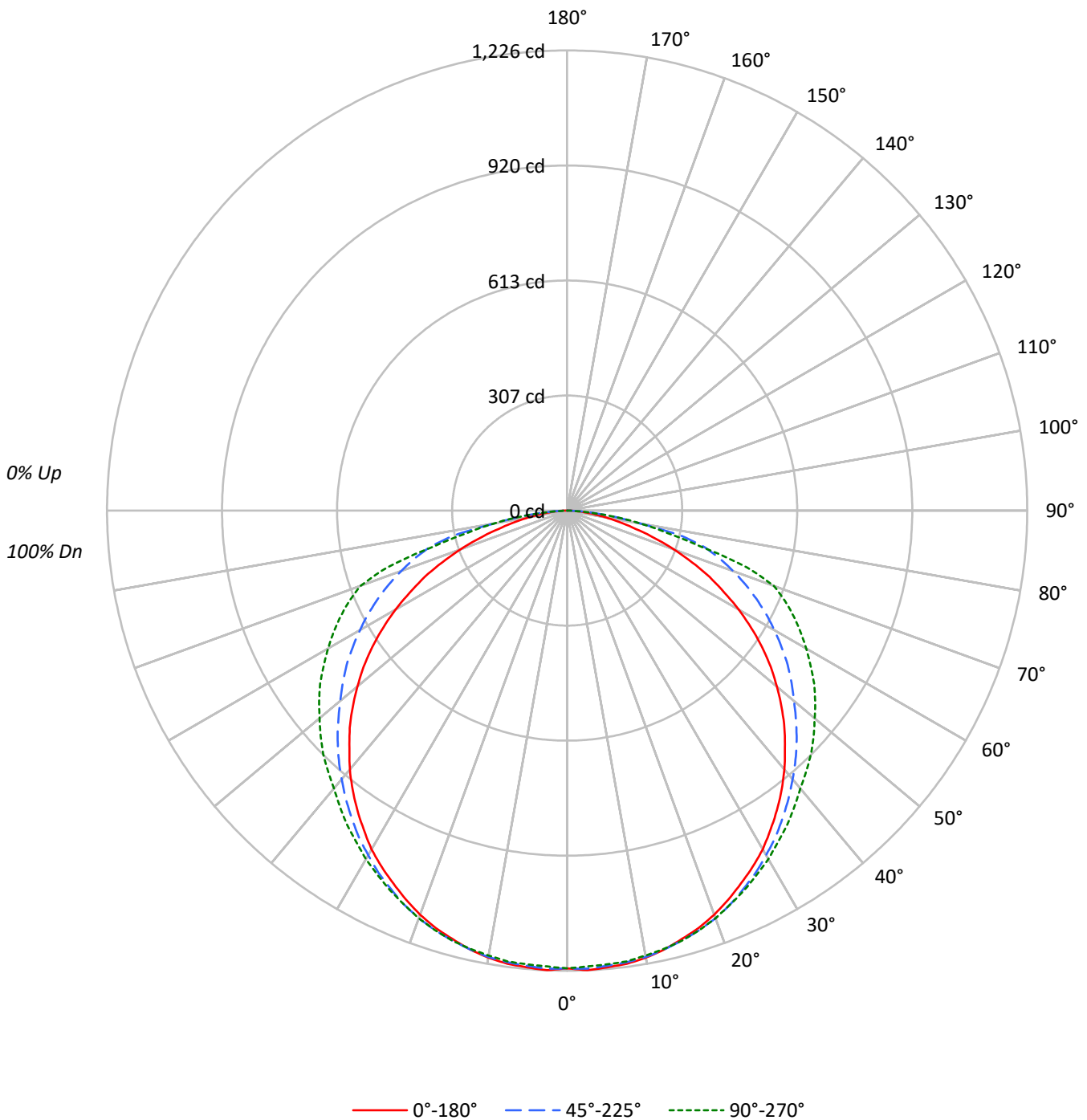
Input Watts (W): 41.004909  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	98	94	105	101	97	93	96	93	90	92	90	87	89	87	84	82					82			
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67					67			
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	63	58	56					56			
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47					47			
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41					41			
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35					35			
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31					31			
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28					28			
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25					25			
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22					22			

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

	0°	45°	90°
0°	1641	1641	1641
5°	1650	1645	1639
10°	1653	1650	1644
15°	1646	1652	1652
20°	1641	1655	1655
25°	1627	1651	1657
30°	1619	1647	1666
35°	1601	1643	1679
40°	1582	1642	1698
45°	1558	1646	1748
50°	1527	1652	1802
55°	1487	1683	1884
60°	1421	1716	1979
65°	1332	1770	2119
70°	1192	1850	2305
75°	984	1979	1906
80°	803	1529	1544
85°	645	1016	954



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	115.8	3.0
10°-20°	334.2	8.7
20°-30°	510.8	13.2
30°-40°	624.8	16.2
40°-50°	668.5	17.3
50°-60°	640.1	16.6
60°-70°	541.5	14.0
70°-80°	343.3	8.9
80°-90°	79.0	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°	960.9	24.9
0°-40°	1585.6	41.1
0°-60°	2894.3	75.0
0°-90°	3858.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3858.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1220	1220	1220	1220	1220	
5°	1222	1216	1218	1216	1214	116
15°	1182	1180	1186	1186	1186	334
25°	1096	1096	1112	1116	1116	506
35°	974	980	1000	1014	1022	610
45°	819	833	865	901	919	631
55°	634	654	717	777	803	565
65°	418	458	556	632	666	412
75°	189	267	381	379	367	206
85°	42	64	66	60	62	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1219.6	1219.6	1219.6	1219.6	1219.6
2.5°	1225.6	1219.6	1221.6	1219.6	1215.6
5°	1221.6	1215.6	1217.6	1215.6	1213.6
7.5°	1217.6	1211.6	1213.6	1211.6	1211.6
10°	1209.6	1203.6	1207.6	1205.6	1203.6
12.5°	1197.7	1193.7	1197.7	1195.7	1195.7
15°	1181.7	1179.7	1185.7	1185.7	1185.7
17.5°	1165.8	1163.8	1171.8	1171.8	1171.8
20°	1145.9	1143.9	1155.8	1155.8	1155.8
22.5°	1121.9	1119.9	1135.9	1135.9	1135.9
25°	1096.0	1096.0	1112.0	1116.0	1116.0
27.5°	1070.1	1070.1	1088.1	1094.0	1094.0
30°	1042.2	1042.2	1060.2	1068.1	1072.1
32.5°	1008.4	1012.3	1032.3	1042.2	1046.2
35°	974.5	980.5	1000.4	1014.3	1022.3
37.5°	938.6	944.6	968.5	984.4	994.4
40°	900.7	908.7	934.6	954.5	966.5
42.5°	858.9	870.8	900.7	926.6	942.6
45°	819.0	833.0	864.9	900.7	918.7
47.5°	775.2	791.1	827.0	872.8	890.8
50°	729.4	745.3	789.1	841.0	860.9
52.5°	683.5	701.5	753.3	809.1	833.0
55°	633.7	653.6	717.4	777.2	803.1
57.5°	581.9	605.8	677.5	741.3	769.2
60°	528.1	558.0	637.7	705.4	735.3
62.5°	472.3	508.2	597.8	669.6	701.5
65°	418.5	458.3	556.0	631.7	665.6
67.5°	360.7	410.5	514.1	595.8	627.7
70°	302.9	360.7	470.3	554.0	585.9
72.5°	245.1	314.9	426.5	502.2	502.2
75°	189.3	267.0	380.6	378.6	366.7
77.5°	143.5	223.2	312.9	267.0	269.0
80°	103.6	179.4	197.3	197.3	199.3
82.5°	69.7	137.5	127.5	125.5	129.5
85°	41.8	63.8	65.8	59.8	61.8
87.5°	19.9	21.9	17.9	12.0	12.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)