

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: P263104

Luminaire Tested: **24CZ-LD5-60-SQP-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263104  
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-LD5-60-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: 4193.0 lumens  
Efficiency: N/A  
Efficacy: 92.6 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

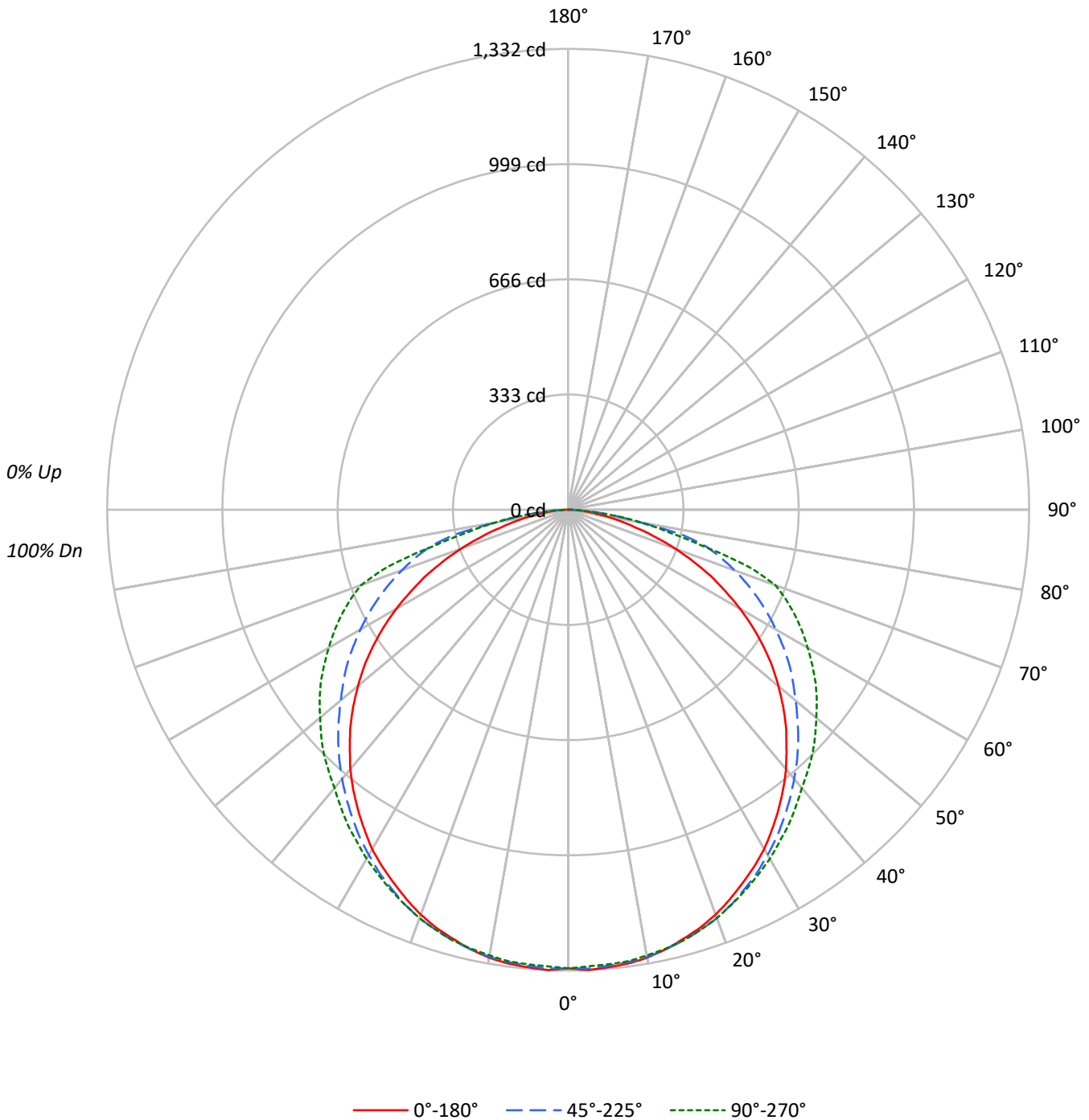
Input Watts (W): 45.286164  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	63	58	56
4	81	68	59	52	79	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	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	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°	1783	1783	1783
5°	1793	1787	1781
10°	1796	1793	1787
15°	1789	1795	1795
20°	1783	1799	1799
25°	1768	1794	1801
30°	1760	1790	1810
35°	1740	1786	1825
40°	1720	1784	1845
45°	1694	1789	1900
50°	1659	1795	1958
55°	1616	1829	2047
60°	1544	1865	2151
65°	1448	1924	2303
70°	1295	2011	2505
75°	1070	2151	2072
80°	872	1661	1678
85°	702	1104	1036



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.9	3.0
10°-20°	363.3	8.7
20°-30°	555.2	13.2
30°-40°	679.0	16.2
40°-50°	726.5	17.3
50°-60°	695.7	16.6
60°-70°	588.5	14.0
70°-80°	373.1	8.9
80°-90°	85.8	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°	1044.3	24.9
0°-40°	1723.3	41.1
0°-60°	3145.6	75.0
0°-90°	4193.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4193.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1326	1326	1326	1326	1326	
5°	1328	1321	1323	1321	1319	126
15°	1284	1282	1289	1289	1289	363
25°	1191	1191	1208	1213	1213	550
35°	1059	1066	1087	1102	1111	663
45°	890	905	940	979	998	686
55°	689	710	780	845	873	614
65°	455	498	604	687	723	448
75°	206	290	414	412	398	224
85°	46	69	72	65	67	54
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1325.5	1325.5	1325.5	1325.5	1325.5
2.5°	1332.0	1325.5	1327.7	1325.5	1321.2
5°	1327.7	1321.2	1323.3	1321.2	1319.0
7.5°	1323.3	1316.8	1319.0	1316.8	1316.8
10°	1314.7	1308.2	1312.5	1310.3	1308.2
12.5°	1301.7	1297.3	1301.7	1299.5	1299.5
15°	1284.3	1282.2	1288.7	1288.7	1288.7
17.5°	1267.0	1264.8	1273.5	1273.5	1273.5
20°	1245.4	1243.2	1256.2	1256.2	1256.2
22.5°	1219.4	1217.2	1234.5	1234.5	1234.5
25°	1191.2	1191.2	1208.5	1212.9	1212.9
27.5°	1163.0	1163.0	1182.5	1189.0	1189.0
30°	1132.7	1132.7	1152.2	1160.9	1165.2
32.5°	1095.9	1100.2	1121.9	1132.7	1137.1
35°	1059.1	1065.6	1087.2	1102.4	1111.1
37.5°	1020.1	1026.6	1052.6	1069.9	1080.7
40°	979.0	987.6	1015.8	1037.4	1050.4
42.5°	933.5	946.5	979.0	1007.1	1024.4
45°	890.2	905.3	940.0	979.0	998.4
47.5°	842.5	859.8	898.8	948.6	968.1
50°	792.7	810.0	857.7	914.0	935.6
52.5°	742.9	762.4	818.7	879.3	905.3
55°	688.7	710.4	779.7	844.7	872.8
57.5°	632.4	658.4	736.4	805.7	836.0
60°	573.9	606.4	693.1	766.7	799.2
62.5°	513.3	552.3	649.7	727.7	762.4
65°	454.8	498.1	604.3	686.6	723.4
67.5°	392.0	446.2	558.8	647.6	682.2
70°	329.2	392.0	511.1	602.1	636.8
72.5°	266.4	342.2	463.5	545.8	545.8
75°	205.8	290.2	413.7	411.5	398.5
77.5°	155.9	242.6	340.0	290.2	292.4
80°	112.6	194.9	214.4	214.4	216.6
82.5°	75.8	149.4	138.6	136.4	140.8
85°	45.5	69.3	71.5	65.0	67.1
87.5°	21.7	23.8	19.5	13.0	13.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)