

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: P263603

Luminaire Tested: **24CZ-LD5-65-RDP-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263603  
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-LD5-65-RDP-UNV-L93050-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3861.1 lumens  
Efficiency: N/A  
Efficacy: 77.5 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

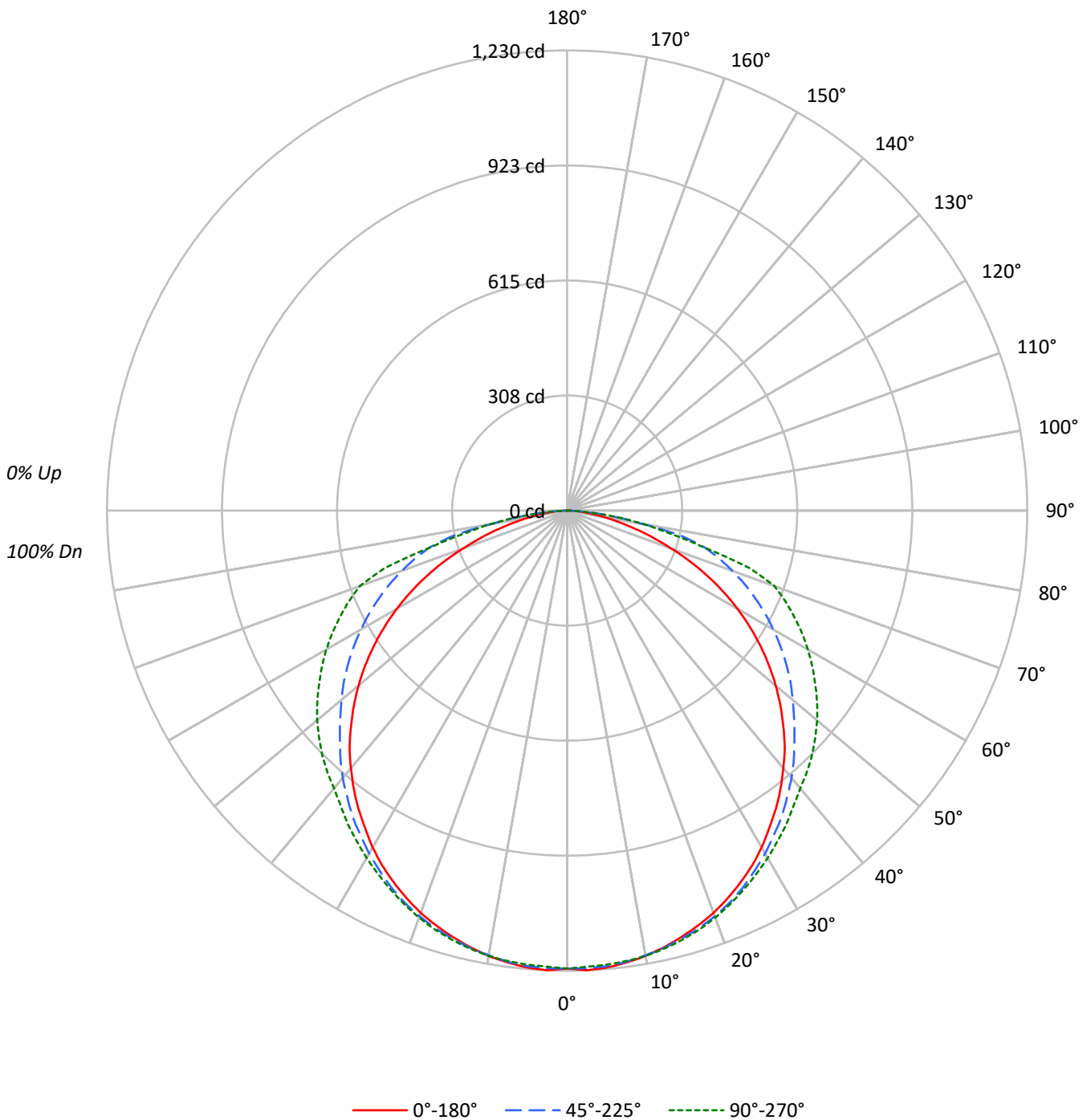
Input Watts (W): 49.847442  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1647	1647	1647
5°	1656	1651	1645
10°	1652	1649	1652
15°	1644	1649	1655
20°	1638	1652	1657
25°	1628	1651	1659
30°	1615	1645	1665
35°	1598	1642	1679
40°	1579	1639	1702
45°	1555	1635	1761
50°	1524	1647	1826
55°	1480	1676	1899
60°	1417	1713	2000
65°	1319	1767	2130
70°	1166	1847	2318
75°	978	1976	1946
80°	780	1561	1620
85°	616	1056	968



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.1	3.0
10°-20°	334.1	8.7
20°-30°	510.3	13.2
30°-40°	623.9	16.2
40°-50°	667.8	17.3
50°-60°	640.6	16.6
60°-70°	540.9	14.0
70°-80°	345.7	9.0
80°-90°	81.7	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°	960.5	24.9
0°-40°	1584.5	41.0
0°-60°	2892.9	74.9
0°-90°	3861.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3861.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1224	1224	1224	1224	1224	
5°	1226	1218	1222	1220	1218	116
15°	1180	1176	1184	1188	1188	333
25°	1097	1095	1112	1116	1118	505
35°	973	981	1000	1013	1022	608
45°	817	831	859	899	926	630
55°	631	652	715	779	810	563
65°	414	454	555	633	669	409
75°	188	268	380	388	374	203
85°	40	66	68	66	63	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1224.0	1224.0	1224.0	1224.0	1224.0
2.5°	1229.7	1222.1	1224.0	1224.0	1220.2
5°	1225.9	1218.3	1222.1	1220.2	1218.3
7.5°	1218.3	1212.6	1216.4	1216.4	1214.5
10°	1208.8	1203.1	1206.9	1208.8	1208.8
12.5°	1195.5	1191.7	1197.4	1197.4	1199.3
15°	1180.3	1176.5	1184.1	1187.9	1187.9
17.5°	1163.2	1161.3	1170.8	1172.7	1174.6
20°	1144.2	1142.3	1153.7	1153.7	1157.5
22.5°	1121.4	1119.5	1134.7	1134.7	1138.5
25°	1096.7	1094.8	1111.9	1115.7	1117.6
27.5°	1070.1	1068.2	1085.3	1091.0	1094.8
30°	1039.7	1039.7	1058.7	1066.3	1072.0
32.5°	1005.4	1011.1	1028.2	1039.7	1047.3
35°	973.1	980.7	999.7	1013.0	1022.5
37.5°	937.0	944.6	965.5	982.6	994.0
40°	899.0	908.5	933.2	952.2	969.3
42.5°	861.0	870.5	897.1	925.6	948.4
45°	817.3	830.6	859.1	899.0	925.6
47.5°	773.6	786.9	823.0	872.4	899.0
50°	727.9	743.2	786.9	843.9	872.4
52.5°	680.4	697.5	752.7	813.5	842.0
55°	631.0	651.9	714.6	779.3	809.7
57.5°	579.7	602.5	676.6	745.1	777.4
60°	526.5	555.0	636.7	708.9	743.2
62.5°	471.4	505.6	596.8	670.9	707.0
65°	414.3	454.3	555.0	632.9	669.0
67.5°	355.4	408.6	513.2	594.9	631.0
70°	296.5	359.2	469.5	553.1	589.2
72.5°	241.4	313.6	425.7	503.7	511.3
75°	188.2	268.0	380.1	387.7	374.4
77.5°	140.6	222.4	313.6	279.4	277.5
80°	100.7	178.7	201.5	207.2	209.1
82.5°	66.5	134.9	131.1	134.9	133.0
85°	39.9	66.5	68.4	66.5	62.7
87.5°	19.0	24.7	19.0	17.1	15.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)