

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: P276943

Luminaire Tested: **24CZ2-60HE-RDP-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276943  
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: 24CZ2-60HE-RDP-UNV-L82765-W2A1-U-5700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4001.3 lumens  
Efficiency: N/A  
Efficacy: 88.0 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

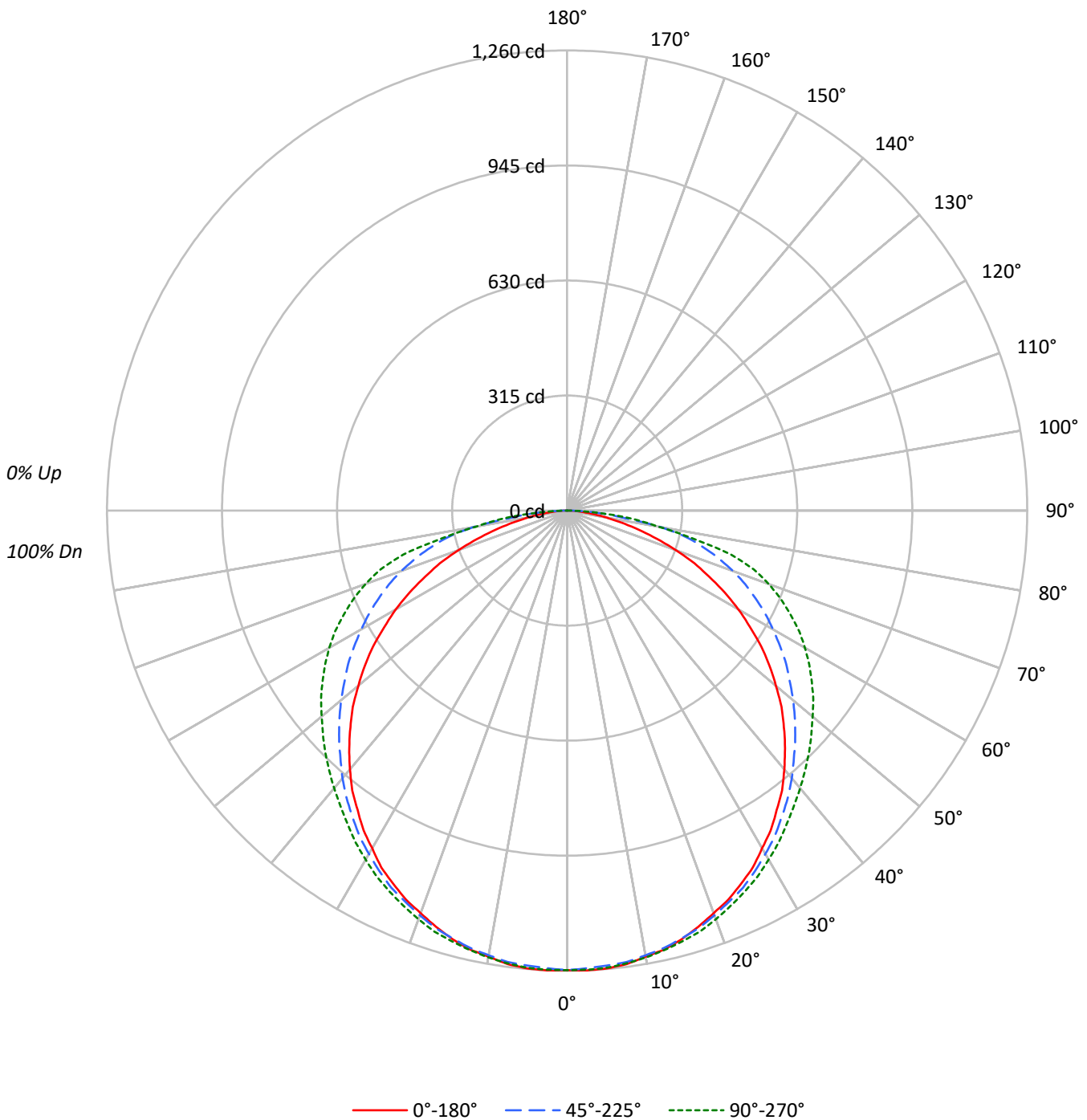
Input Watts (W): 45.477  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1693	1693	1693
5°	1699	1689	1697
10°	1695	1689	1697
15°	1692	1689	1700
20°	1680	1688	1705
25°	1674	1691	1709
30°	1659	1687	1714
35°	1643	1682	1721
40°	1625	1680	1743
45°	1597	1681	1783
50°	1562	1691	1836
55°	1522	1718	1918
60°	1458	1752	2024
65°	1365	1813	2148
70°	1242	1897	2311
75°	1052	2001	2414
80°	831	2015	1953
85°	613	1531	1715



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.4	3.0
10°-20°	343.5	8.6
20°-30°	525.3	13.1
30°-40°	642.2	16.0
40°-50°	684.5	17.1
50°-60°	654.4	16.4
60°-70°	554.4	13.9
70°-80°	372.6	9.3
80°-90°	105.1	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°	988.2	24.7
0°-40°	1630.4	40.7
0°-60°	2969.3	74.2
0°-90°	4001.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4001.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1258	1258	1258	1258	1258	
5°	1258	1256	1250	1256	1256	120
15°	1215	1215	1213	1223	1221	342
25°	1127	1131	1139	1149	1151	520
35°	1000	1008	1024	1044	1048	627
45°	840	853	883	921	937	648
55°	649	673	732	790	818	578
65°	429	472	570	645	675	426
75°	202	276	385	450	464	217
85°	40	81	99	107	111	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1258.3	1258.3	1258.3	1258.3	1258.3
2.5°	1260.3	1260.3	1254.3	1258.3	1258.3
5°	1258.3	1256.3	1250.4	1256.3	1256.3
7.5°	1252.4	1250.4	1246.4	1252.4	1250.4
10°	1240.4	1240.4	1236.5	1242.4	1242.4
12.5°	1230.5	1228.5	1226.6	1234.5	1232.5
15°	1214.6	1214.6	1212.7	1222.6	1220.6
17.5°	1194.8	1196.8	1198.8	1206.7	1208.7
20°	1173.0	1176.9	1178.9	1190.8	1190.8
22.5°	1153.1	1155.1	1159.1	1171.0	1171.0
25°	1127.3	1131.3	1139.2	1149.1	1151.1
27.5°	1101.5	1103.5	1113.4	1127.3	1129.3
30°	1067.8	1073.7	1085.6	1101.5	1103.5
32.5°	1038.0	1044.0	1057.9	1073.7	1077.7
35°	1000.3	1008.2	1024.1	1044.0	1047.9
37.5°	966.6	972.5	992.4	1014.2	1020.1
40°	924.9	936.8	956.6	982.4	992.4
42.5°	883.2	895.1	918.9	952.7	964.6
45°	839.5	853.4	883.2	920.9	936.8
47.5°	795.9	811.7	845.5	889.2	907.0
50°	746.3	766.1	807.8	857.4	877.2
52.5°	698.6	722.4	768.1	823.7	849.5
55°	649.0	672.8	732.4	789.9	817.7
57.5°	593.4	625.2	690.7	756.2	785.9
60°	541.8	571.6	651.0	722.4	752.2
62.5°	486.3	525.9	611.3	686.7	716.5
65°	428.7	472.4	569.6	645.0	674.8
67.5°	377.1	424.7	527.9	603.4	633.1
70°	315.6	375.1	482.3	557.7	587.5
72.5°	258.0	323.5	434.7	508.1	535.9
75°	202.4	275.9	385.0	450.5	464.4
77.5°	150.8	228.2	333.4	361.2	351.3
80°	107.2	182.6	260.0	246.1	252.1
82.5°	69.5	138.9	160.8	182.6	188.5
85°	39.7	81.4	99.2	107.2	111.1
87.5°	17.9	29.8	39.7	39.7	37.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)