

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: P276773

Luminaire Tested: **24CZ2-70HE-RDP-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276773  
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: 24CZ2-70HE-RDP-UNV-L83050-W2A1-U-3500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4486.0 lumens  
Efficiency: N/A  
Efficacy: 83.6 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

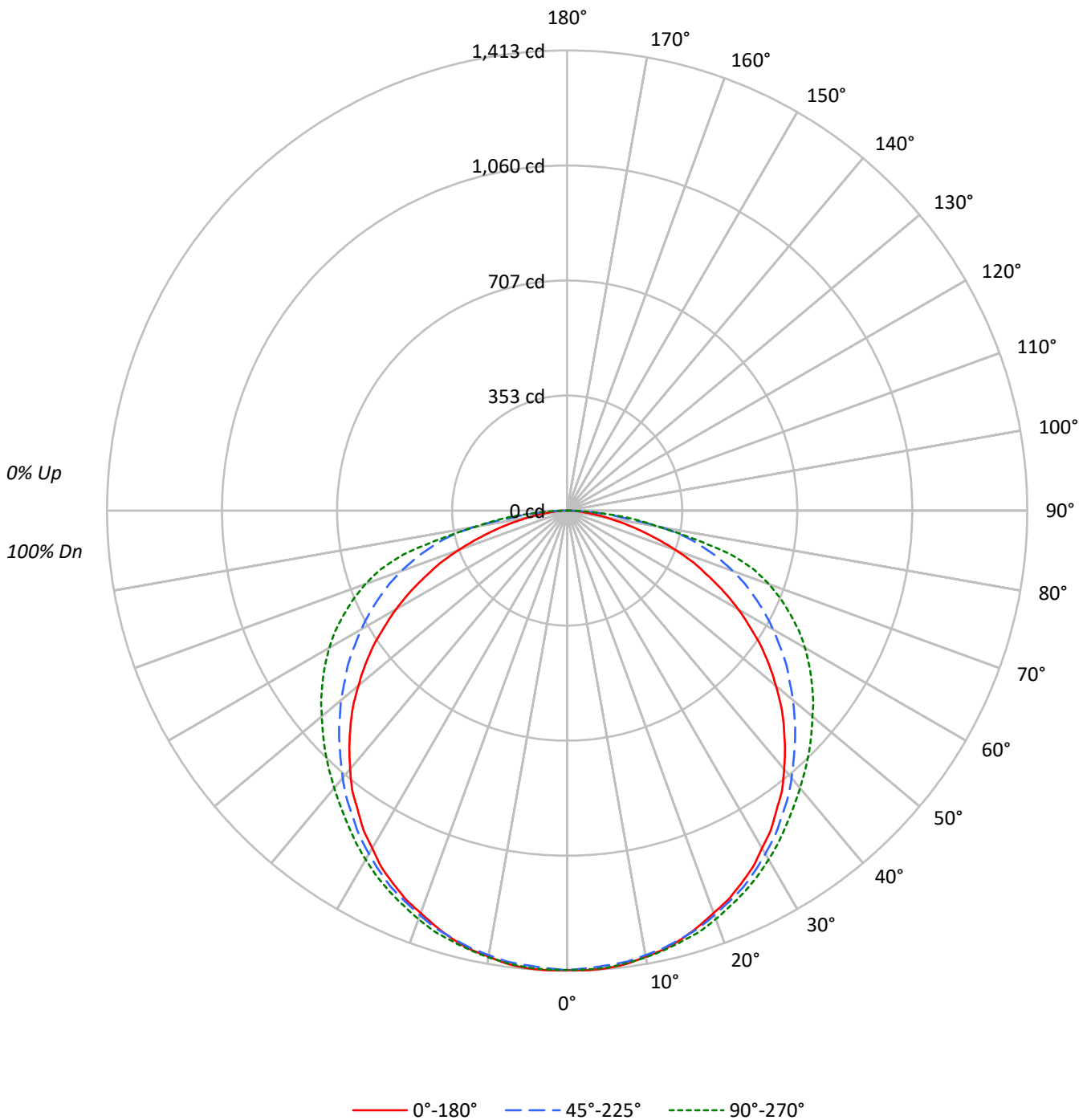
Input Watts (W): 53.661  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1898	1898	1898
5°	1905	1893	1902
10°	1900	1894	1903
15°	1897	1894	1906
20°	1883	1892	1912
25°	1876	1896	1916
30°	1860	1891	1922
35°	1842	1886	1930
40°	1821	1884	1954
45°	1791	1884	1999
50°	1751	1896	2059
55°	1707	1926	2150
60°	1635	1964	2269
65°	1530	2033	2408
70°	1392	2127	2591
75°	1180	2244	2707
80°	931	2259	2190
85°	687	1718	1924



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.8	3.0
10°-20°	385.1	8.6
20°-30°	589.0	13.1
30°-40°	720.0	16.0
40°-50°	767.4	17.1
50°-60°	733.7	16.4
60°-70°	621.5	13.9
70°-80°	417.7	9.3
80°-90°	117.8	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°	1107.9	24.7
0°-40°	1827.9	40.7
0°-60°	3328.9	74.2
0°-90°	4486.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4486.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1411	1411	1411	1411	1411	
5°	1411	1408	1402	1408	1408	134
15°	1362	1362	1360	1371	1368	384
25°	1264	1268	1277	1288	1291	583
35°	1122	1130	1148	1170	1175	703
45°	941	957	990	1032	1050	726
55°	728	754	821	886	917	648
65°	481	530	639	723	756	477
75°	227	309	432	505	521	243
85°	44	91	111	120	125	55
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1410.7	1410.7	1410.7	1410.7	1410.7
2.5°	1412.9	1412.9	1406.3	1410.7	1410.7
5°	1410.7	1408.5	1401.8	1408.5	1408.5
7.5°	1404.0	1401.8	1397.4	1404.0	1401.8
10°	1390.7	1390.7	1386.2	1392.9	1392.9
12.5°	1379.6	1377.3	1375.1	1384.0	1381.8
15°	1361.8	1361.8	1359.5	1370.7	1368.4
17.5°	1339.5	1341.7	1344.0	1352.9	1355.1
20°	1315.0	1319.5	1321.7	1335.1	1335.1
22.5°	1292.8	1295.0	1299.5	1312.8	1312.8
25°	1263.9	1268.3	1277.2	1288.3	1290.6
27.5°	1234.9	1237.2	1248.3	1263.9	1266.1
30°	1197.1	1203.8	1217.1	1234.9	1237.2
32.5°	1163.7	1170.4	1186.0	1203.8	1208.2
35°	1121.5	1130.4	1148.2	1170.4	1174.9
37.5°	1083.6	1090.3	1112.6	1137.0	1143.7
40°	1036.9	1050.3	1072.5	1101.4	1112.6
42.5°	990.2	1003.5	1030.2	1068.1	1081.4
45°	941.2	956.8	990.2	1032.5	1050.3
47.5°	892.3	910.1	947.9	996.8	1016.9
50°	836.6	858.9	905.6	961.2	983.5
52.5°	783.2	809.9	861.1	923.4	952.3
55°	727.6	754.3	821.1	885.6	916.7
57.5°	665.3	700.9	774.3	847.8	881.1
60°	607.5	640.8	729.8	809.9	843.3
62.5°	545.2	589.7	685.3	769.9	803.3
65°	480.6	529.6	638.6	723.2	756.5
67.5°	422.8	476.2	591.9	676.4	709.8
70°	353.8	420.5	540.7	625.3	658.6
72.5°	289.3	362.7	487.3	569.6	600.8
75°	227.0	309.3	431.7	505.1	520.7
77.5°	169.1	255.9	373.8	405.0	393.8
80°	120.2	204.7	291.5	275.9	282.6
82.5°	77.9	155.8	180.2	204.7	211.4
85°	44.5	91.2	111.3	120.2	124.6
87.5°	20.0	33.4	44.5	44.5	42.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)