

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: P276775

Luminaire Tested: **24CZ2-70HE-RDP-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276775  
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-4500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4755.0 lumens  
Efficiency: N/A  
Efficacy: 84.5 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

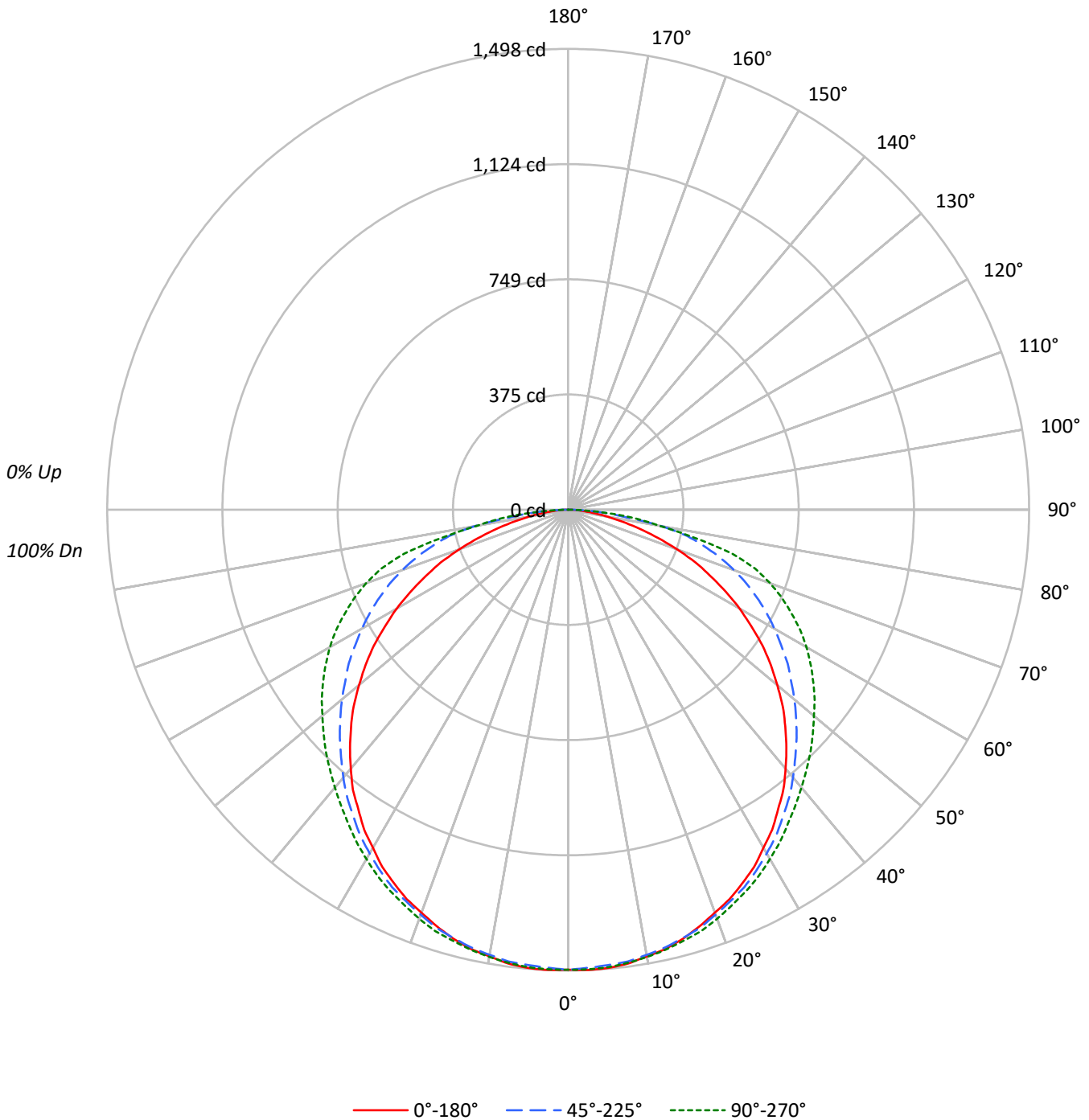
Input Watts (W): 56.290389  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2012	2012	2012
5°	2020	2007	2016
10°	2014	2008	2017
15°	2011	2007	2020
20°	1996	2006	2026
25°	1989	2010	2031
30°	1971	2004	2037
35°	1952	1999	2045
40°	1930	1997	2071
45°	1898	1997	2118
50°	1856	2009	2182
55°	1809	2042	2279
60°	1733	2082	2405
65°	1622	2155	2553
70°	1475	2255	2746
75°	1251	2379	2869
80°	987	2394	2321
85°	729	1820	2039



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.8	3.0
10°-20°	408.2	8.6
20°-30°	624.3	13.1
30°-40°	763.2	16.0
40°-50°	813.4	17.1
50°-60°	777.7	16.4
60°-70°	658.8	13.9
70°-80°	442.8	9.3
80°-90°	124.9	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°	1174.3	24.7
0°-40°	1937.5	40.7
0°-60°	3528.5	74.2
0°-90°	4755.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4755.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1495	1495	1495	1495	1495	
5°	1495	1493	1486	1493	1493	142
15°	1443	1443	1441	1453	1450	407
25°	1340	1344	1354	1366	1368	617
35°	1189	1198	1217	1241	1245	745
45°	998	1014	1050	1094	1113	770
55°	771	800	870	939	972	687
65°	509	561	677	766	802	506
75°	241	328	458	535	552	258
85°	47	97	118	127	132	58
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1495.3	1495.3	1495.3	1495.3	1495.3
2.5°	1497.7	1497.7	1490.6	1495.3	1495.3
5°	1495.3	1493.0	1485.9	1493.0	1493.0
7.5°	1488.2	1485.9	1481.2	1488.2	1485.9
10°	1474.1	1474.1	1469.4	1476.4	1476.4
12.5°	1462.3	1459.9	1457.6	1467.0	1464.7
15°	1443.4	1443.4	1441.1	1452.9	1450.5
17.5°	1419.8	1422.2	1424.6	1434.0	1436.3
20°	1393.9	1398.6	1401.0	1415.1	1415.1
22.5°	1370.3	1372.7	1377.4	1391.5	1391.5
25°	1339.6	1344.4	1353.8	1365.6	1368.0
27.5°	1309.0	1311.3	1323.1	1339.6	1342.0
30°	1268.9	1276.0	1290.1	1309.0	1311.3
32.5°	1233.5	1240.6	1257.1	1276.0	1280.7
35°	1188.7	1198.1	1217.0	1240.6	1245.3
37.5°	1148.6	1155.7	1179.3	1205.2	1212.3
40°	1099.1	1113.2	1136.8	1167.5	1179.3
42.5°	1049.5	1063.7	1092.0	1132.1	1146.2
45°	997.7	1014.2	1049.5	1094.4	1113.2
47.5°	945.8	964.6	1004.7	1056.6	1077.9
50°	886.8	910.4	959.9	1018.9	1042.5
52.5°	830.2	858.5	912.8	978.8	1009.5
55°	771.2	799.5	870.3	938.7	971.7
57.5°	705.2	742.9	820.8	898.6	934.0
60°	643.9	679.3	773.6	858.5	893.9
62.5°	577.8	625.0	726.4	816.1	851.4
65°	509.4	561.3	676.9	766.5	801.9
67.5°	448.1	504.7	627.4	717.0	752.4
70°	375.0	445.8	573.1	662.7	698.1
72.5°	306.6	384.4	516.5	603.8	636.8
75°	240.6	327.8	457.6	535.4	551.9
77.5°	179.2	271.2	396.2	429.3	417.5
80°	127.4	217.0	309.0	292.5	299.5
82.5°	82.5	165.1	191.0	217.0	224.1
85°	47.2	96.7	117.9	127.4	132.1
87.5°	21.2	35.4	47.2	47.2	44.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)