

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: P275920

Luminaire Tested: **24CZ2-55HE-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275920  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-55HE-UNV-L83050-W2A1-U-4500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5565.0 lumens  
Efficiency: N/A  
Efficacy: 132.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

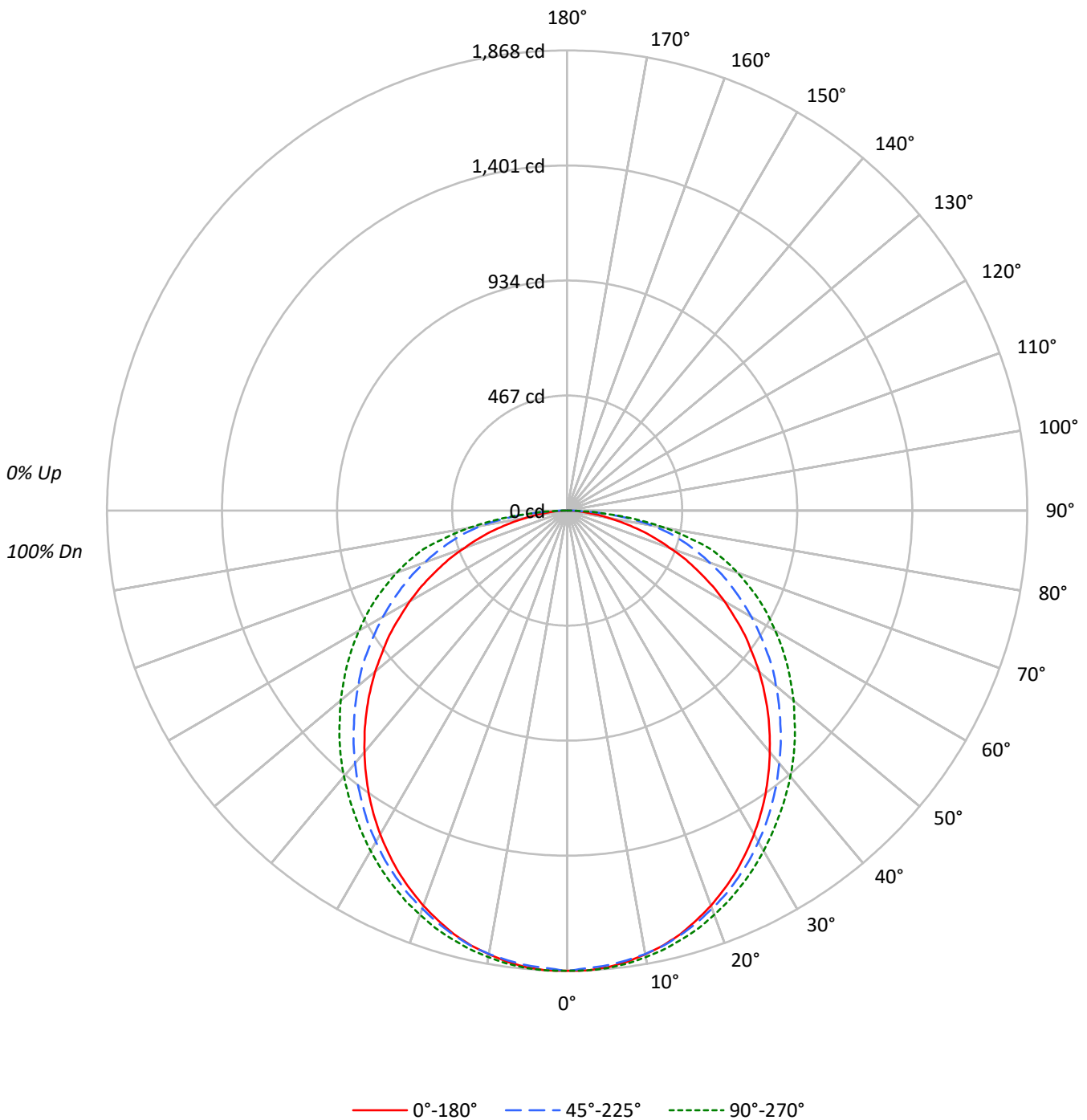
Input Watts (W): 42.036  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	89	86	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	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2514	2514	2514
5°	2514	2504	2519
10°	2499	2497	2515
15°	2478	2484	2510
20°	2444	2462	2500
25°	2404	2440	2490
30°	2357	2412	2479
35°	2306	2383	2471
40°	2248	2352	2476
45°	2191	2329	2488
50°	2130	2317	2511
55°	2065	2313	2557
60°	1984	2324	2624
65°	1880	2359	2738
70°	1746	2419	2893
75°	1593	2540	3138
80°	1309	2734	3137
85°	1003	2523	2695



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.7	3.2
10°-20°	504.5	9.1
20°-30°	759.2	13.6
30°-40°	909.8	16.3
40°-50°	948.1	17.0
50°-60°	882.1	15.9
60°-70°	726.5	13.1
70°-80°	494.8	8.9
80°-90°	163.4	2.9
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°	1440.4	25.9
0°-40°	2350.2	42.2
0°-60°	4180.3	75.1
0°-90°	5565.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5565.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1868	1868	1868	1868	1868	
5°	1861	1861	1854	1863	1865	177
15°	1779	1781	1783	1800	1802	501
25°	1620	1627	1644	1672	1677	746
35°	1404	1421	1450	1490	1504	878
45°	1152	1176	1224	1285	1308	888
55°	880	910	986	1064	1090	785
65°	591	641	741	828	860	586
75°	306	375	488	576	604	323
85°	65	126	163	175	175	81
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1868.4	1868.4	1868.4	1868.4	1868.4
2.5°	1868.4	1868.4	1859.1	1868.4	1868.4
5°	1861.0	1861.0	1853.6	1862.9	1864.7
7.5°	1848.0	1849.9	1842.4	1853.6	1855.4
10°	1829.4	1831.3	1827.6	1838.7	1840.6
12.5°	1807.1	1809.0	1809.0	1822.0	1823.9
15°	1779.3	1781.1	1783.0	1799.7	1801.6
17.5°	1744.0	1749.6	1753.3	1773.7	1777.4
20°	1706.8	1712.4	1719.8	1742.1	1745.8
22.5°	1664.1	1671.6	1684.6	1708.7	1714.3
25°	1619.6	1627.0	1643.7	1671.6	1677.1
27.5°	1569.4	1580.6	1601.0	1630.7	1638.1
30°	1517.4	1528.5	1552.7	1584.3	1595.4
32.5°	1461.7	1476.5	1504.4	1539.7	1550.8
35°	1404.1	1420.8	1450.5	1489.5	1504.4
37.5°	1342.8	1361.4	1396.7	1439.4	1458.0
40°	1279.7	1302.0	1339.1	1389.2	1409.7
42.5°	1216.5	1237.0	1283.4	1337.2	1359.5
45°	1151.5	1175.7	1224.0	1285.2	1307.5
47.5°	1084.7	1108.8	1166.4	1231.4	1251.8
50°	1017.8	1041.9	1106.9	1175.7	1199.8
52.5°	945.4	976.9	1051.2	1119.9	1144.1
55°	880.4	910.1	986.2	1064.2	1090.2
57.5°	806.1	841.4	924.9	1006.6	1034.5
60°	737.3	774.5	863.6	947.2	975.1
62.5°	666.8	707.6	802.3	887.8	919.4
65°	590.6	640.8	741.1	828.3	859.9
67.5°	521.9	573.9	679.8	768.9	796.8
70°	443.9	507.0	614.8	703.9	735.5
72.5°	377.0	440.2	553.5	640.8	672.3
75°	306.5	375.2	488.5	575.8	603.6
77.5°	235.9	312.0	425.3	492.2	501.5
80°	169.0	248.9	352.9	391.9	404.9
82.5°	118.9	191.3	260.0	286.0	293.5
85°	65.0	126.3	163.4	174.6	174.6
87.5°	27.9	53.9	65.0	66.9	68.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)