

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: P277105

Luminaire Tested: **24CZ2-75HE-RDP-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277105  
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: 24CZ2-75HE-RDP-UNV-L92765-W2A1-U-5700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4521.1 lumens  
Efficiency: N/A  
Efficacy: 75.1 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

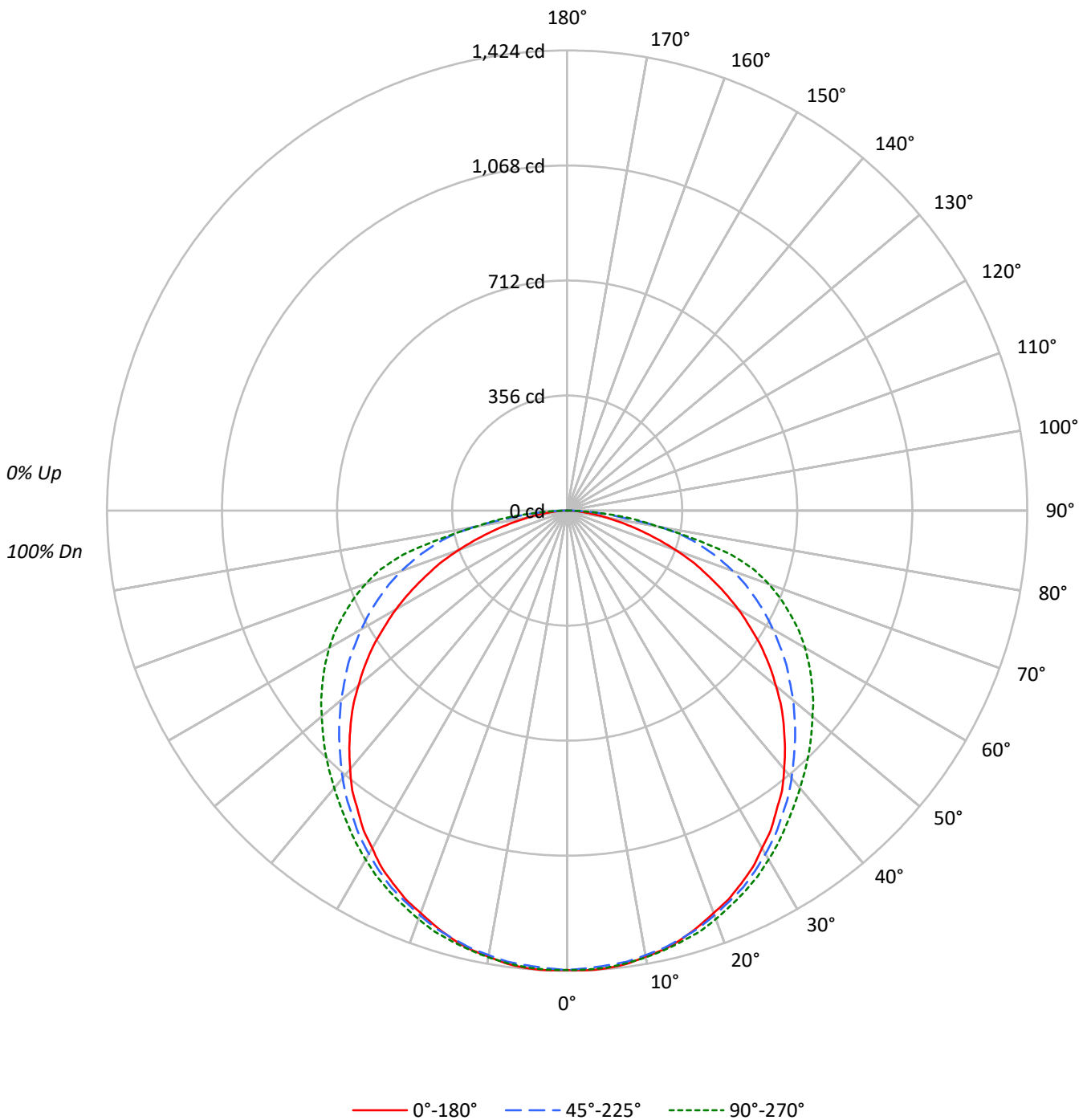
Input Watts (W): 60.171  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1913	1913	1913
5°	1920	1908	1917
10°	1915	1909	1918
15°	1912	1909	1921
20°	1898	1907	1927
25°	1891	1911	1931
30°	1874	1906	1937
35°	1856	1901	1945
40°	1835	1899	1969
45°	1805	1899	2014
50°	1765	1910	2075
55°	1720	1941	2167
60°	1647	1979	2287
65°	1542	2049	2428
70°	1403	2144	2611
75°	1189	2262	2728
80°	938	2276	2207
85°	693	1731	1939



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.9	3.0
10°-20°	388.2	8.6
20°-30°	593.6	13.1
30°-40°	725.6	16.0
40°-50°	773.4	17.1
50°-60°	739.4	16.4
60°-70°	626.4	13.9
70°-80°	421.0	9.3
80°-90°	118.8	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°	1116.6	24.7
0°-40°	1842.2	40.7
0°-60°	3355.0	74.2
0°-90°	4521.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4521.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1422	1422	1422	1422	1422	
5°	1422	1420	1413	1420	1420	135
15°	1372	1372	1370	1381	1379	387
25°	1274	1278	1287	1298	1301	587
35°	1130	1139	1157	1180	1184	708
45°	949	964	998	1040	1058	732
55°	733	760	828	892	924	653
65°	484	534	644	729	762	481
75°	229	312	435	509	525	245
85°	45	92	112	121	126	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1421.8	1421.8	1421.8	1421.8	1421.8
2.5°	1424.0	1424.0	1417.3	1421.8	1421.8
5°	1421.8	1419.5	1412.8	1419.5	1419.5
7.5°	1415.0	1412.8	1408.3	1415.0	1412.8
10°	1401.6	1401.6	1397.1	1403.8	1403.8
12.5°	1390.4	1388.1	1385.9	1394.9	1392.6
15°	1372.4	1372.4	1370.2	1381.4	1379.2
17.5°	1350.0	1352.3	1354.5	1363.5	1365.7
20°	1325.3	1329.8	1332.1	1345.5	1345.5
22.5°	1302.9	1305.2	1309.6	1323.1	1323.1
25°	1273.8	1278.3	1287.2	1298.4	1300.7
27.5°	1244.6	1246.9	1258.1	1273.8	1276.0
30°	1206.5	1213.2	1226.7	1244.6	1246.9
32.5°	1172.9	1179.6	1195.3	1213.2	1217.7
35°	1130.2	1139.2	1157.2	1179.6	1184.1
37.5°	1092.1	1098.8	1121.3	1145.9	1152.7
40°	1045.0	1058.5	1080.9	1110.1	1121.3
42.5°	997.9	1011.4	1038.3	1076.4	1089.9
45°	948.6	964.3	997.9	1040.5	1058.5
47.5°	899.3	917.2	955.3	1004.7	1024.8
50°	843.2	865.6	912.7	968.8	991.2
52.5°	789.4	816.3	867.9	930.7	959.8
55°	733.3	760.2	827.5	892.5	923.9
57.5°	670.5	706.4	780.4	854.4	888.0
60°	612.2	645.9	735.6	816.3	849.9
62.5°	549.4	594.3	690.7	775.9	809.6
65°	484.4	533.7	643.6	728.8	762.5
67.5°	426.1	479.9	596.5	681.7	715.4
70°	356.6	423.8	544.9	630.2	663.8
72.5°	291.5	365.5	491.1	574.1	605.5
75°	228.7	311.7	435.1	509.1	524.8
77.5°	170.4	257.9	376.7	408.1	396.9
80°	121.1	206.3	293.8	278.1	284.8
82.5°	78.5	157.0	181.6	206.3	213.0
85°	44.9	91.9	112.1	121.1	125.6
87.5°	20.2	33.6	44.9	44.9	42.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)