

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: P277100

Luminaire Tested: **24CZ2-75HE-RDP-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277100  
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-3500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4103.1 lumens  
Efficiency: N/A  
Efficacy: 70.1 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

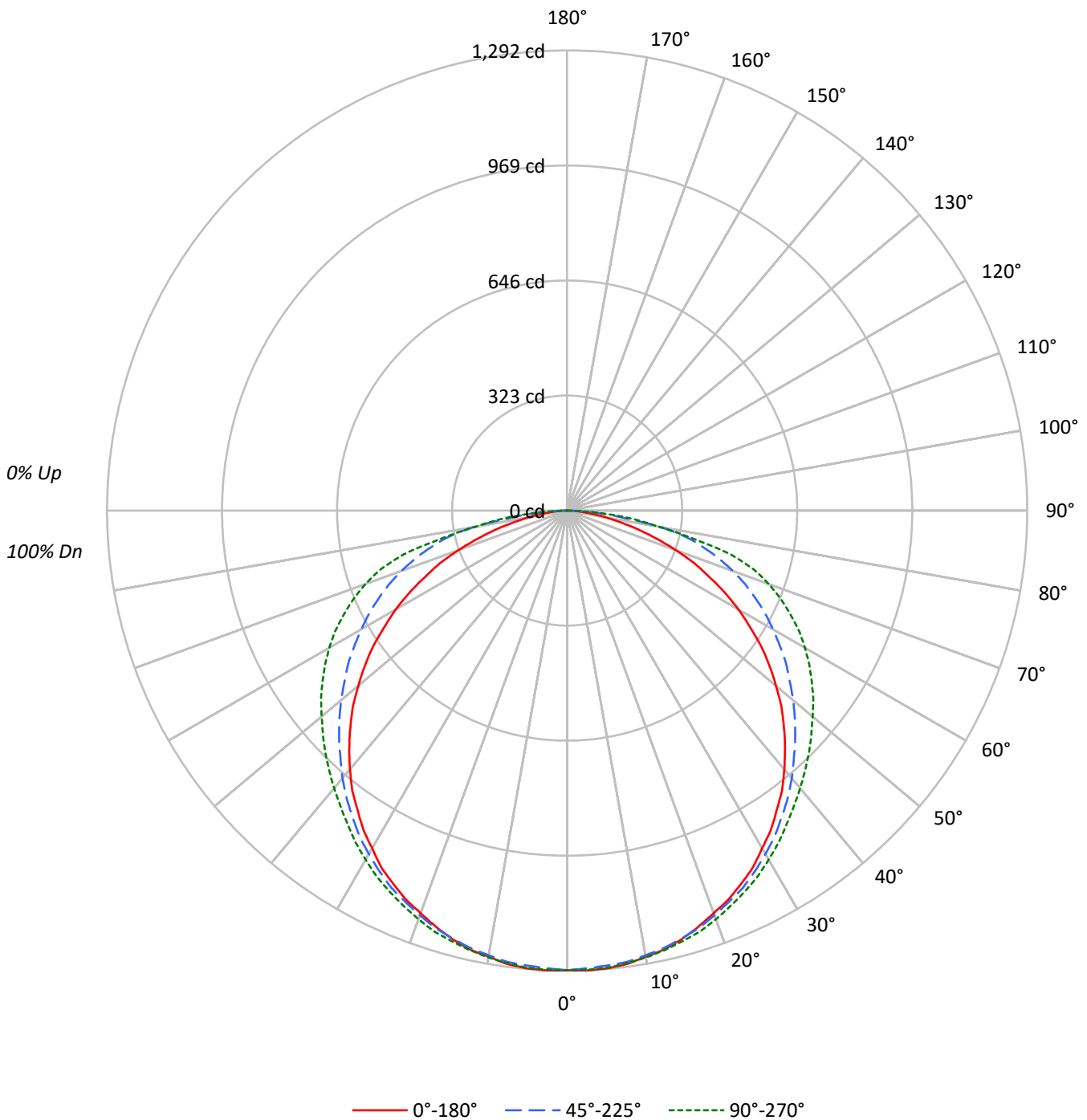
Input Watts (W): 58.497  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P277100

CATALOG NUMBER: 24CZ2-75HE-RDP-UNV-L92765-W2A1-U-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P277100

CATALOG NUMBER: 24CZ2-75HE-RDP-UNV-L92765-W2A1-U-3500K

**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°	1736	1736	1736
5°	1743	1732	1740
10°	1738	1732	1741
15°	1735	1732	1744
20°	1722	1731	1748
25°	1716	1734	1752
30°	1701	1730	1758
35°	1685	1725	1765
40°	1666	1723	1787
45°	1638	1723	1828
50°	1602	1734	1883
55°	1561	1762	1967
60°	1495	1796	2076
65°	1400	1860	2203
70°	1273	1946	2370
75°	1079	2052	2476
80°	852	2066	2003
85°	628	1572	1760



TEST NUMBER: P277100

CATALOG NUMBER: 24CZ2-75HE-RDP-UNV-L92765-W2A1-U-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.4	3.0
10°-20°	352.3	8.6
20°-30°	538.7	13.1
30°-40°	658.5	16.0
40°-50°	701.9	17.1
50°-60°	671.1	16.4
60°-70°	568.5	13.9
70°-80°	382.1	9.3
80°-90°	107.8	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°	1013.4	24.7
0°-40°	1671.9	40.7
0°-60°	3044.8	74.2
0°-90°	4103.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4103.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1290	1290	1290	1290	1290	
5°	1290	1288	1282	1288	1288	123
15°	1246	1246	1244	1254	1252	351
25°	1156	1160	1168	1178	1180	533
35°	1026	1034	1050	1070	1075	643
45°	861	875	906	944	961	664
55°	666	690	751	810	838	593
65°	440	484	584	661	692	436
75°	208	283	395	462	476	222
85°	41	83	102	110	114	50
90°	0	0	0	0	0	



TEST NUMBER: P277100

CATALOG NUMBER: 24CZ2-75HE-RDP-UNV-L92765-W2A1-U-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1290.3	1290.3	1290.3	1290.3	1290.3
2.5°	1292.4	1292.4	1286.3	1290.3	1290.3
5°	1290.3	1288.3	1282.2	1288.3	1288.3
7.5°	1284.2	1282.2	1278.1	1284.2	1282.2
10°	1272.0	1272.0	1267.9	1274.0	1274.0
12.5°	1261.8	1259.8	1257.8	1265.9	1263.9
15°	1245.5	1245.5	1243.5	1253.7	1251.7
17.5°	1225.2	1227.2	1229.3	1237.4	1239.4
20°	1202.8	1206.9	1208.9	1221.1	1221.1
22.5°	1182.5	1184.5	1188.6	1200.8	1200.8
25°	1156.0	1160.1	1168.2	1178.4	1180.4
27.5°	1129.5	1131.6	1141.8	1156.0	1158.0
30°	1094.9	1101.0	1113.3	1129.5	1131.6
32.5°	1064.4	1070.5	1084.8	1101.0	1105.1
35°	1025.7	1033.9	1050.2	1070.5	1074.6
37.5°	991.1	997.3	1017.6	1040.0	1046.1
40°	948.4	960.6	981.0	1007.4	1017.6
42.5°	905.7	917.9	942.3	976.9	989.1
45°	860.9	875.1	905.7	944.3	960.6
47.5°	816.1	832.4	867.0	911.8	930.1
50°	765.2	785.6	828.3	879.2	899.6
52.5°	716.4	740.8	787.6	844.6	871.1
55°	665.5	689.9	751.0	810.0	838.5
57.5°	608.5	641.1	708.3	775.4	805.9
60°	555.6	586.1	667.5	740.8	771.3
62.5°	498.6	539.3	626.8	704.2	734.7
65°	439.6	484.4	584.1	661.4	692.0
67.5°	386.7	435.5	541.4	618.7	649.2
70°	323.6	384.7	494.6	571.9	602.4
72.5°	264.6	331.7	445.7	521.0	549.5
75°	207.6	282.9	394.8	462.0	476.2
77.5°	154.7	234.0	341.9	370.4	360.2
80°	109.9	187.2	266.6	252.4	258.5
82.5°	71.2	142.5	164.9	187.2	193.3
85°	40.7	83.4	101.8	109.9	114.0
87.5°	18.3	30.5	40.7	40.7	38.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)