

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: P276232

Luminaire Tested: **24CZ2-60HE-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276232
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: 24CZ2-60HE-UNV-L92765-W2A1-U-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4649.6 lumens
Efficiency: N/A
Efficacy: 105.9 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

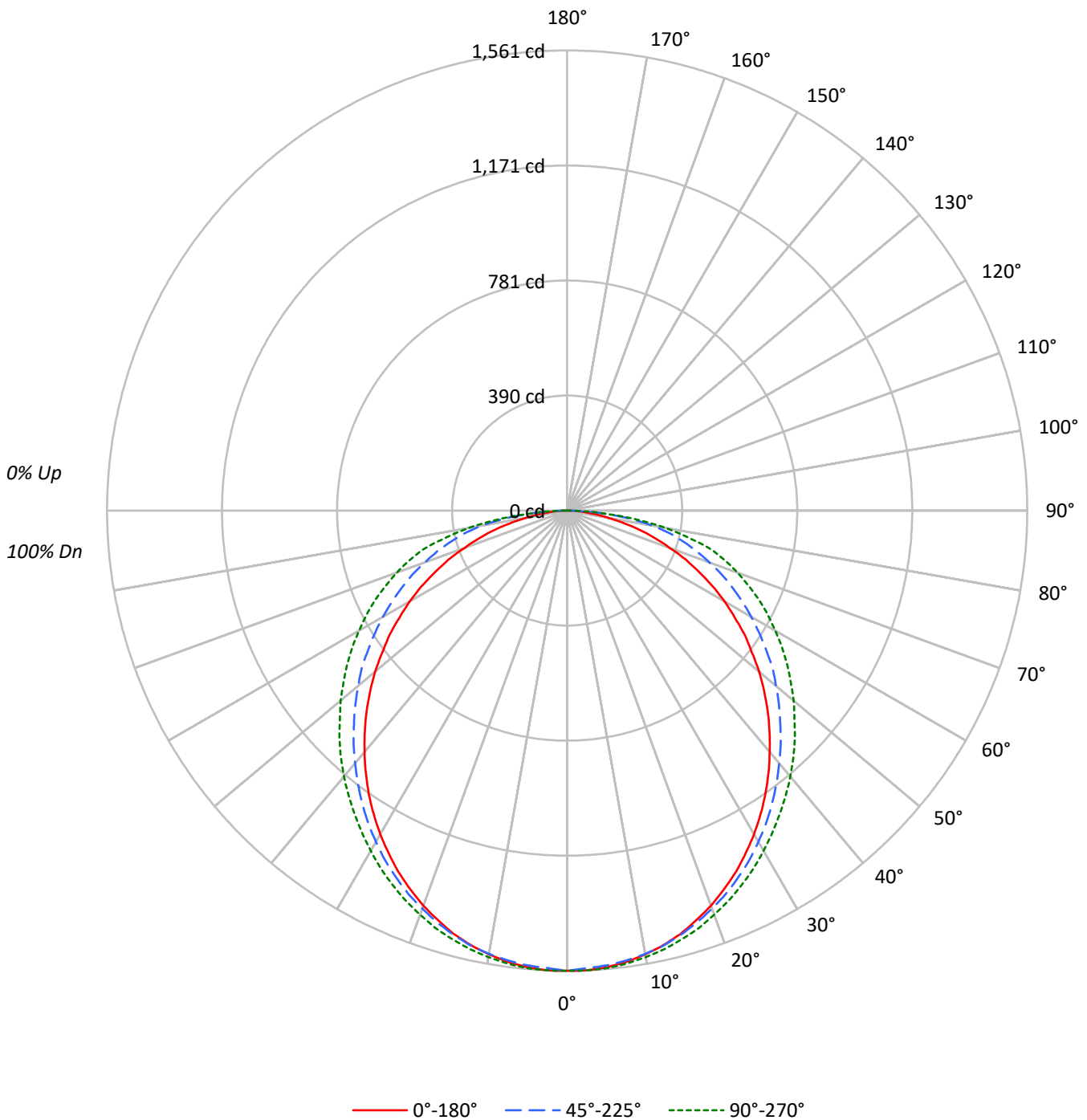
Input Watts (W): 43.896
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P276232

CATALOG NUMBER: 24CZ2-60HE-UNV-L92765-W2A1-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P276232

CATALOG NUMBER: 24CZ2-60HE-UNV-L92765-W2A1-U-3000K

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°	2100	2100	2100
5°	2100	2092	2104
10°	2088	2086	2101
15°	2071	2075	2097
20°	2042	2057	2089
25°	2009	2039	2080
30°	1970	2016	2071
35°	1927	1991	2065
40°	1878	1965	2069
45°	1831	1946	2079
50°	1780	1936	2098
55°	1725	1933	2137
60°	1658	1942	2192
65°	1571	1971	2287
70°	1459	2020	2417
75°	1331	2122	2622
80°	1094	2284	2621
85°	838	2109	2252



TEST NUMBER: P276232

CATALOG NUMBER: 24CZ2-60HE-UNV-L92765-W2A1-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.6	3.2
10°-20°	421.5	9.1
20°-30°	634.3	13.6
30°-40°	760.1	16.3
40°-50°	792.1	17.0
50°-60°	737.0	15.9
60°-70°	607.0	13.1
70°-80°	413.4	8.9
80°-90°	136.5	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°	1203.4	25.9
0°-40°	1963.6	42.2
0°-60°	3492.7	75.1
0°-90°	4649.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4649.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1561	1561	1561	1561	1561	
5°	1555	1555	1549	1556	1558	148
15°	1487	1488	1490	1504	1505	419
25°	1353	1359	1373	1397	1401	623
35°	1173	1187	1212	1244	1257	733
45°	962	982	1023	1074	1092	742
55°	736	760	824	889	911	656
65°	494	535	619	692	718	490
75°	256	314	408	481	504	270
85°	54	106	137	146	146	67
90°	0	0	0	0	0	



TEST NUMBER: P276232

CATALOG NUMBER: 24CZ2-60HE-UNV-L92765-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1561.1	1561.1	1561.1	1561.1	1561.1
2.5°	1561.1	1561.1	1553.3	1561.1	1561.1
5°	1554.9	1554.9	1548.7	1556.4	1558.0
7.5°	1544.0	1545.6	1539.4	1548.7	1550.2
10°	1528.5	1530.0	1526.9	1536.3	1537.8
12.5°	1509.9	1511.4	1511.4	1522.3	1523.8
15°	1486.6	1488.2	1489.7	1503.7	1505.2
17.5°	1457.1	1461.8	1464.9	1481.9	1485.0
20°	1426.1	1430.7	1436.9	1455.6	1458.7
22.5°	1390.4	1396.6	1407.5	1427.6	1432.3
25°	1353.1	1359.4	1373.3	1396.6	1401.3
27.5°	1311.2	1320.6	1337.6	1362.5	1368.7
30°	1267.8	1277.1	1297.3	1323.7	1333.0
32.5°	1221.2	1233.7	1256.9	1286.4	1295.7
35°	1173.1	1187.1	1211.9	1244.5	1256.9
37.5°	1121.9	1137.4	1166.9	1202.6	1218.1
40°	1069.2	1087.8	1118.8	1160.7	1177.8
42.5°	1016.4	1033.5	1072.3	1117.3	1135.9
45°	962.1	982.3	1022.6	1073.8	1092.4
47.5°	906.2	926.4	974.5	1028.8	1045.9
50°	850.4	870.5	924.9	982.3	1002.4
52.5°	789.9	816.2	878.3	935.7	955.9
55°	735.5	760.4	824.0	889.2	910.9
57.5°	673.5	703.0	772.8	841.1	864.3
60°	616.1	647.1	721.6	791.4	814.7
62.5°	557.1	591.2	670.4	741.7	768.1
65°	493.5	535.4	619.2	692.1	718.5
67.5°	436.0	479.5	567.9	642.4	665.7
70°	370.9	423.6	513.6	588.1	614.5
72.5°	315.0	367.8	462.4	535.4	561.7
75°	256.0	313.5	408.1	481.0	504.3
77.5°	197.1	260.7	355.4	411.2	419.0
80°	141.2	207.9	294.8	327.4	338.3
82.5°	99.3	159.8	217.2	239.0	245.2
85°	54.3	105.5	136.6	145.9	145.9
87.5°	23.3	45.0	54.3	55.9	57.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)