

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: P272185

Luminaire Tested: **24CZ2-65-S-UNV-L930-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P272185
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-65-S-UNV-L930-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (112) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

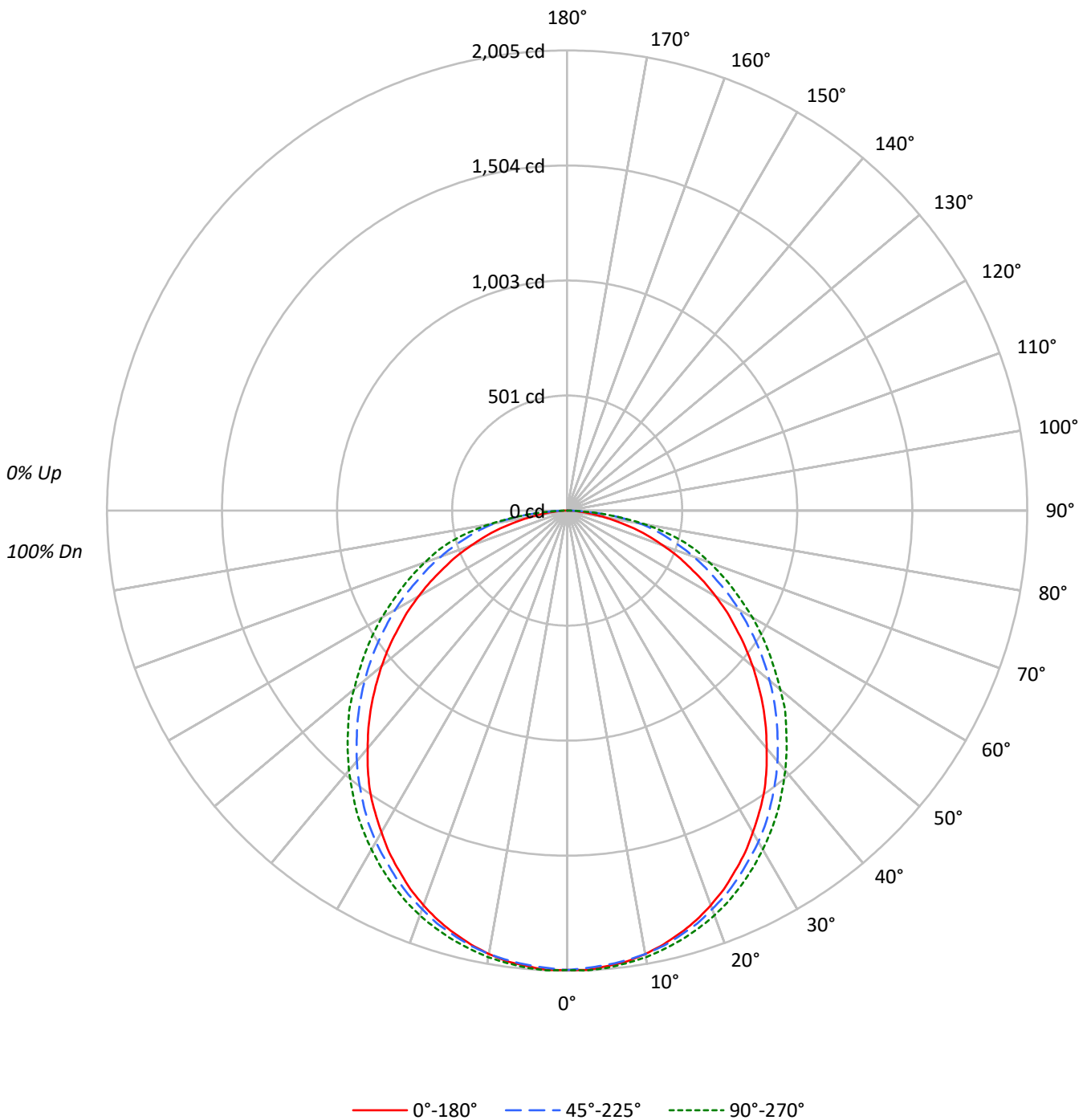
Lumens per Lamp: N/A
Luminaire Lumens: 5698.0 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 62.8
Input Voltage (V): NR
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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2693	2693	2693
5°	2691	2684	2701
10°	2680	2680	2700
15°	2655	2667	2695
20°	2620	2646	2687
25°	2571	2620	2671
30°	2514	2590	2649
35°	2459	2548	2628
40°	2375	2505	2597
45°	2297	2456	2569
50°	2209	2409	2538
55°	2110	2365	2514
60°	2012	2328	2508
65°	1884	2287	2524
70°	1744	2300	2592
75°	1562	2343	2738
80°	1262	2483	2679
85°	949	2180	2124



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.5	3.3
10°-20°	541.5	9.5
20°-30°	814.0	14.3
30°-40°	969.6	17.0
40°-50°	992.3	17.4
50°-60°	893.4	15.7
60°-70°	701.6	12.3
70°-80°	455.3	8.0
80°-90°	140.8	2.5
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°	1545.0	27.1
0°-40°	2514.5	44.1
0°-60°	4400.2	77.2
0°-90°	5698.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5698.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2002	2002	2002	2002	2002	
5°	1993	1996	1987	1998	2000	189
15°	1906	1911	1915	1931	1935	537
25°	1732	1746	1765	1794	1799	798
35°	1497	1515	1551	1589	1600	934
45°	1207	1236	1290	1339	1350	931
55°	900	939	1008	1061	1072	806
65°	592	637	718	778	793	589
75°	300	358	451	512	527	318
85°	62	114	141	138	138	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2001.7	2001.7	2001.7	2001.7	2001.7
2.5°	2003.6	2003.6	1994.5	2003.6	2005.4
5°	1992.7	1996.3	1987.3	1998.1	1999.9
7.5°	1981.8	1981.8	1976.4	1987.3	1989.1
10°	1961.9	1963.7	1961.9	1974.6	1976.4
12.5°	1936.6	1940.2	1942.0	1954.7	1956.5
15°	1905.8	1911.2	1914.9	1931.2	1934.8
17.5°	1871.4	1876.9	1885.9	1904.0	1907.6
20°	1829.8	1837.0	1847.9	1871.4	1876.9
22.5°	1784.6	1791.8	1809.9	1831.6	1840.7
25°	1732.1	1746.5	1764.6	1793.6	1799.0
27.5°	1679.6	1692.3	1715.8	1746.5	1753.8
30°	1618.0	1638.0	1666.9	1697.7	1704.9
32.5°	1558.3	1578.2	1612.6	1645.2	1654.2
35°	1496.8	1514.9	1551.1	1589.1	1599.9
37.5°	1426.2	1449.7	1489.5	1527.6	1538.4
40°	1352.0	1381.0	1426.2	1466.0	1478.7
42.5°	1281.4	1312.2	1357.4	1400.9	1415.3
45°	1207.2	1236.2	1290.5	1339.3	1350.2
47.5°	1131.2	1163.8	1221.7	1270.5	1288.6
50°	1055.2	1089.6	1151.1	1201.8	1212.6
52.5°	979.2	1015.4	1080.5	1134.8	1140.2
55°	899.5	939.3	1008.1	1060.6	1071.5
57.5°	827.1	861.5	935.7	990.0	1002.7
60°	747.5	785.5	865.1	915.8	932.1
62.5°	671.5	711.3	794.5	845.2	859.7
65°	591.8	637.1	718.5	778.3	792.7
67.5°	523.1	566.5	653.4	711.3	725.8
70°	443.4	492.3	584.6	644.3	658.8
72.5°	374.6	425.3	517.6	575.5	597.3
75°	300.4	358.4	450.7	512.2	526.7
77.5°	228.0	295.0	389.1	436.2	436.2
80°	162.9	233.5	320.4	342.1	345.7
82.5°	106.8	175.6	237.1	235.3	235.3
85°	61.5	114.0	141.2	137.6	137.6
87.5°	23.5	47.1	50.7	50.7	48.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)