

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: P238905

Luminaire Tested: **24EN-LD2-67-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238905
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-234-34)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-67-UNV-L830-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (308)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6529.0 lumens
Efficiency: N/A
Efficacy: 116.4 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

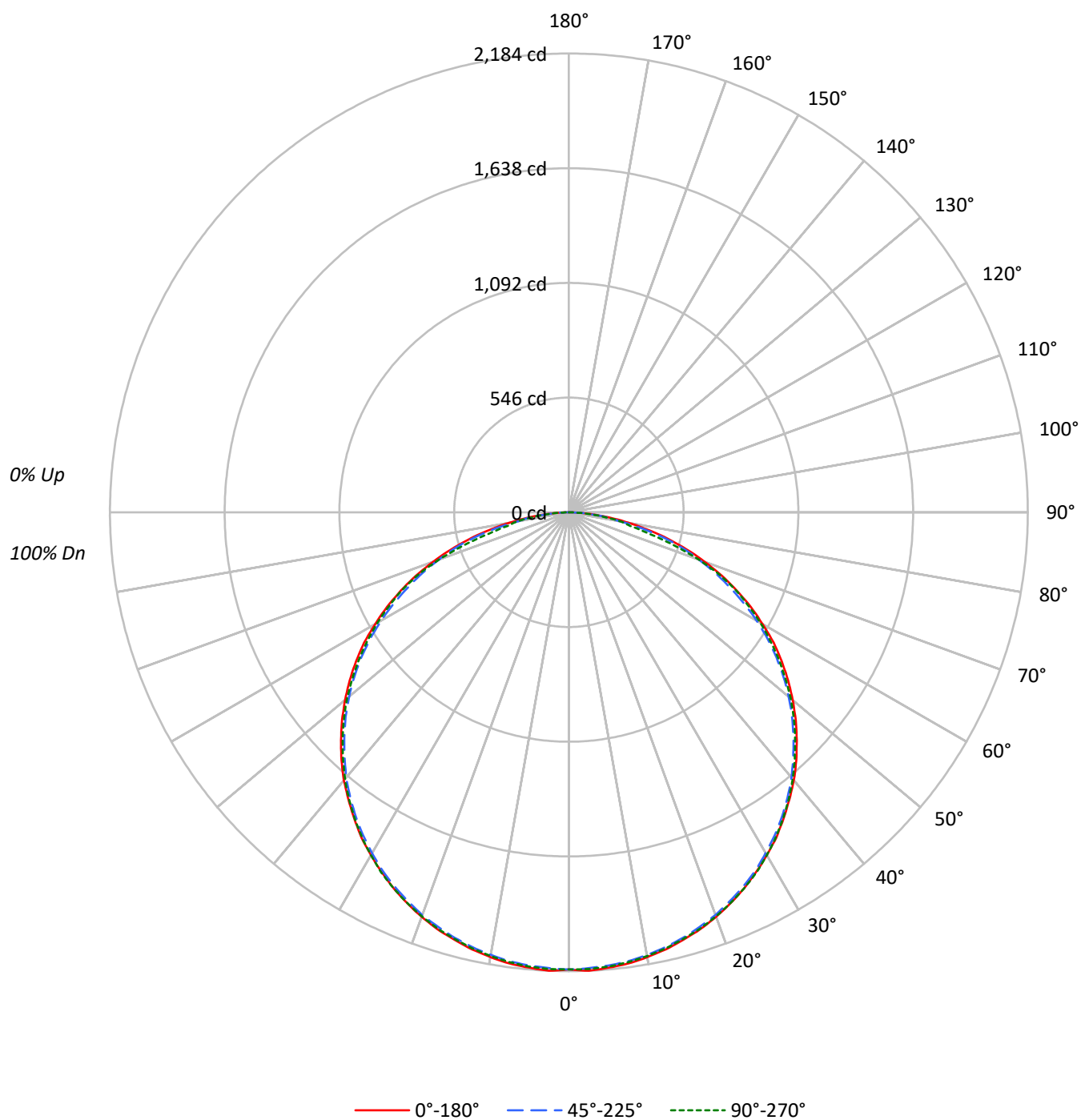
Input Watts (W): 56.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P238905

CATALOG NUMBER: 24EN-LD2-67-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P238905

CATALOG NUMBER: 24EN-LD2-67-UNV-L830-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				0
RW	70	50	30	10	70	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		100
1	109	104	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	90	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	26	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3333	3333	3333
5°	3345	3328	3337
10°	3344	3327	3335
15°	3340	3325	3333
20°	3340	3324	3335
25°	3336	3320	3336
30°	3332	3313	3332
35°	3329	3306	3324
40°	3330	3295	3314
45°	3321	3274	3298
50°	3312	3254	3283
55°	3300	3220	3253
60°	3260	3159	3226
65°	3194	3060	3174
70°	3079	2951	2944
75°	2898	2769	2341
80°	2551	2166	2226
85°	2014	1894	1750



TEST NUMBER: P238905

CATALOG NUMBER: 24EN-LD2-67-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.1	3.2
10°-20°	592.7	9.1
20°-30°	907.0	13.9
30°-40°	1108.6	17.0
40°-50°	1171.5	17.9
50°-60°	1085.4	16.6
60°-70°	850.4	13.0
70°-80°	480.8	7.4
80°-90°	126.6	1.9
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°	1705.8	26.1
0°-40°	2814.4	43.1
0°-60°	5071.3	77.7
0°-90°	6529.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6529.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2176	2176	2176	2176	2176	
5°	2176	2169	2165	2164	2170	207
15°	2106	2098	2097	2095	2102	595
25°	1974	1966	1964	1964	1974	910
35°	1780	1772	1768	1768	1778	1115
45°	1533	1522	1512	1512	1522	1183
55°	1236	1222	1206	1209	1218	1104
65°	881	865	844	855	876	871
75°	490	476	468	417	396	515
85°	115	108	108	102	100	135
90°	0	0	0	0	0	



TEST NUMBER: P238905

CATALOG NUMBER: 24EN-LD2-67-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2175.8	2175.8	2175.8	2175.8	2175.8
2.5°	2184.0	2174.5	2171.8	2169.0	2175.8
5°	2175.8	2169.0	2164.9	2163.6	2170.4
7.5°	2166.3	2158.1	2155.4	2152.7	2159.5
10°	2149.9	2141.7	2139.0	2137.7	2144.5
12.5°	2130.8	2121.3	2119.9	2118.6	2125.4
15°	2106.3	2098.1	2096.7	2095.4	2102.2
17.5°	2080.4	2072.2	2069.4	2068.1	2077.6
20°	2049.0	2040.8	2039.4	2038.1	2046.3
22.5°	2013.5	2005.3	2002.6	2004.0	2012.1
25°	1974.0	1965.8	1964.4	1964.4	1974.0
27.5°	1930.3	1922.1	1922.1	1922.1	1933.0
30°	1883.9	1877.1	1873.0	1874.4	1883.9
32.5°	1836.2	1825.3	1822.5	1823.9	1833.4
35°	1780.2	1772.1	1768.0	1768.0	1777.5
37.5°	1722.9	1714.8	1709.3	1709.3	1718.9
40°	1665.6	1653.4	1647.9	1645.2	1657.5
42.5°	1601.5	1592.0	1579.7	1579.7	1590.6
45°	1533.3	1522.4	1511.5	1511.5	1522.4
47.5°	1463.8	1452.8	1440.6	1440.6	1451.5
50°	1390.1	1379.2	1365.5	1365.5	1377.8
52.5°	1315.1	1302.8	1287.8	1286.4	1298.7
55°	1235.9	1222.3	1205.9	1208.7	1218.2
57.5°	1155.5	1137.7	1121.3	1121.3	1136.4
60°	1064.1	1049.0	1031.3	1034.0	1053.1
62.5°	976.7	957.6	939.9	946.7	963.1
65°	881.3	864.9	844.4	855.3	875.8
67.5°	787.1	769.4	753.0	766.7	776.2
70°	687.5	671.2	658.9	658.9	657.5
72.5°	588.0	573.0	570.2	544.3	527.9
75°	489.7	476.1	467.9	417.4	395.6
77.5°	387.4	383.3	357.4	304.2	297.4
80°	289.2	291.9	245.6	246.9	252.4
82.5°	199.2	195.1	184.2	176.0	173.2
85°	114.6	107.8	107.8	102.3	99.6
87.5°	38.2	42.3	42.3	42.3	43.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)