

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: P238989

Luminaire Tested: **24EN-LD2-70-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238989
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-LD2-70-UNV-L930-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (308)3000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5885.6 lumens
Efficiency: N/A
Efficacy: 97.8 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

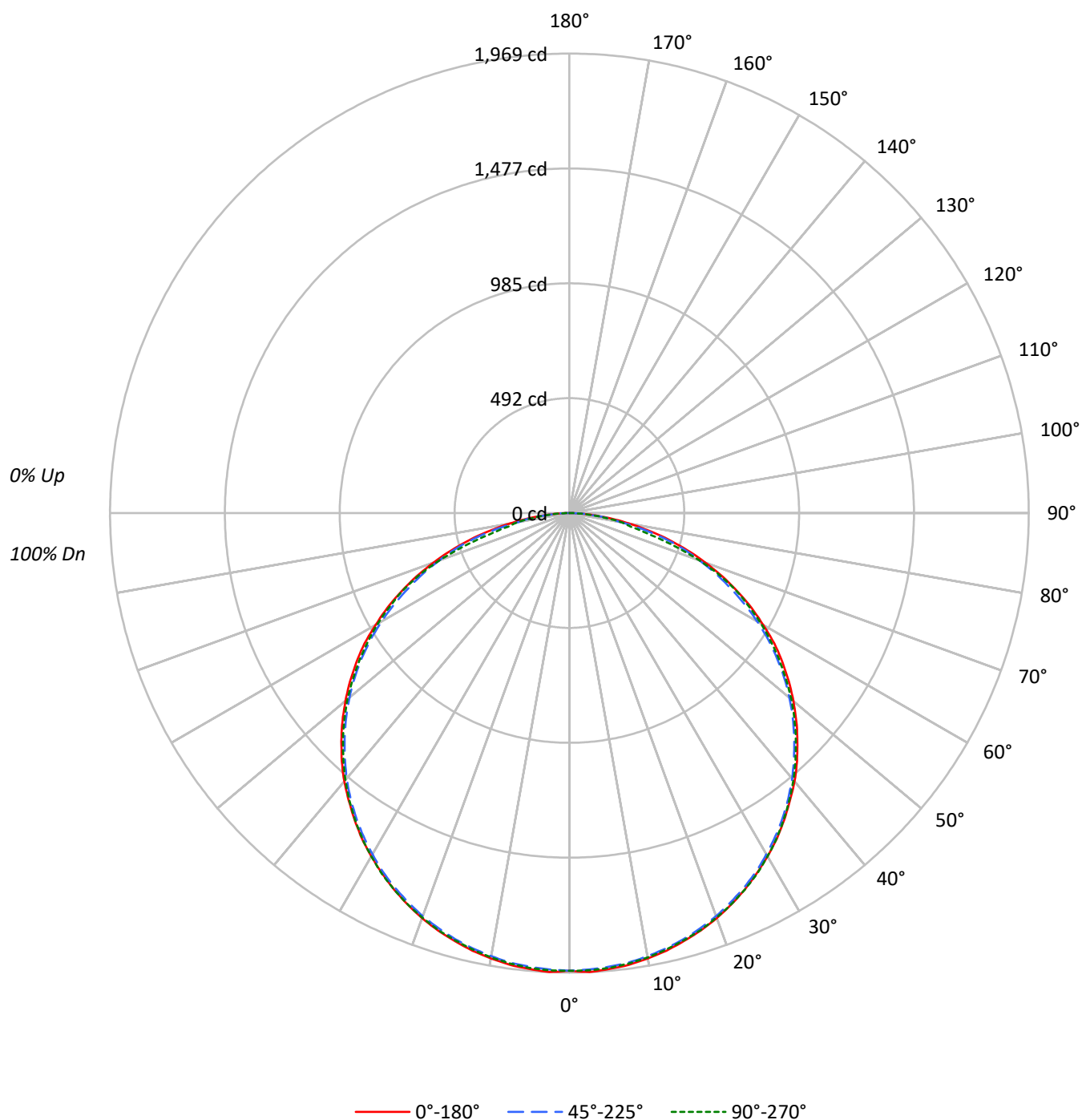
Input Watts (W): 60.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P238989

CATALOG NUMBER: 24EN-LD2-70-UNV-L930-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P238989

CATALOG NUMBER: 24EN-LD2-70-UNV-L930-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	109	104	99	95	106	101	97	94		97	94	91			93	90	88			90
2	98	90	83	77	96	88	82	76		84	79	74			81	77	73			78
3	90	79	70	64	87	77	69	63		74	67	62			71	66	61			69
4	82	70	61	54	79	68	60	53		66	58	53			63	57	52			61
5	75	62	53	46	73	61	52	46		59	51	45			57	50	45			55
6	69	56	47	40	67	55	46	40		53	45	40			51	44	39			50
7	64	50	42	35	62	50	41	35		48	40	35			47	40	35			45
8	60	46	37	31	58	45	37	31		44	36	31			43	36	31			41
9	56	42	34	28	54	42	34	28		40	33	28			39	33	28			38
10	52	39	31	26	51	38	31	25		37	30	25			36	30	25			35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3004	3004	3004
5°	3016	3001	3008
10°	3014	2999	3006
15°	3011	2997	3005
20°	3011	2996	3007
25°	3007	2993	3007
30°	3004	2986	3004
35°	3001	2980	2996
40°	3002	2970	2987
45°	2994	2951	2973
50°	2986	2933	2959
55°	2975	2903	2932
60°	2938	2848	2908
65°	2879	2759	2861
70°	2776	2660	2654
75°	2613	2496	2110
80°	2299	1953	2007
85°	1815	1706	1578



TEST NUMBER: P238989

CATALOG NUMBER: 24EN-LD2-70-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.8	3.2
10°-20°	534.3	9.1
20°-30°	817.6	13.9
30°-40°	999.3	17.0
40°-50°	1056.0	17.9
50°-60°	978.4	16.6
60°-70°	766.6	13.0
70°-80°	433.4	7.4
80°-90°	114.1	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°	1537.7	26.1
0°-40°	2537.0	43.1
0°-60°	4571.5	77.7
0°-90°	5885.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5885.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1961	1961	1961	1961	1961	
5°	1961	1955	1952	1950	1956	187
15°	1899	1891	1890	1889	1895	536
25°	1779	1772	1771	1771	1779	820
35°	1605	1597	1594	1594	1602	1005
45°	1382	1372	1362	1362	1372	1067
55°	1114	1102	1087	1090	1098	995
65°	794	780	761	771	790	785
75°	442	429	422	376	357	464
85°	103	97	97	92	90	122
90°	0	0	0	0	0	



TEST NUMBER: P238989

CATALOG NUMBER: 24EN-LD2-70-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1961.4	1961.4	1961.4	1961.4	1961.4
2.5°	1968.8	1960.2	1957.7	1955.3	1961.4
5°	1961.4	1955.3	1951.6	1950.4	1956.5
7.5°	1952.8	1945.4	1943.0	1940.5	1946.7
10°	1938.1	1930.7	1928.2	1927.0	1933.1
12.5°	1920.8	1912.2	1911.0	1909.8	1915.9
15°	1898.7	1891.3	1890.1	1888.9	1895.0
17.5°	1875.3	1868.0	1865.5	1864.3	1872.9
20°	1847.1	1839.7	1838.4	1837.2	1844.6
22.5°	1815.1	1807.7	1805.2	1806.5	1813.9
25°	1779.4	1772.0	1770.8	1770.8	1779.4
27.5°	1740.1	1732.7	1732.7	1732.7	1742.5
30°	1698.3	1692.1	1688.4	1689.6	1698.3
32.5°	1655.2	1645.4	1642.9	1644.1	1652.8
35°	1604.8	1597.4	1593.7	1593.7	1602.3
37.5°	1553.1	1545.8	1540.9	1540.9	1549.5
40°	1501.5	1490.4	1485.5	1483.1	1494.1
42.5°	1443.7	1435.1	1424.0	1424.0	1433.9
45°	1382.2	1372.4	1362.5	1362.5	1372.4
47.5°	1319.5	1309.7	1298.6	1298.6	1308.4
50°	1253.1	1243.3	1231.0	1231.0	1242.0
52.5°	1185.5	1174.4	1160.9	1159.6	1170.7
55°	1114.1	1101.8	1087.1	1089.5	1098.1
57.5°	1041.6	1025.6	1010.8	1010.8	1024.4
60°	959.2	945.7	929.7	932.1	949.4
62.5°	880.5	863.3	847.3	853.4	868.2
65°	794.4	779.6	761.2	771.0	789.5
67.5°	709.6	693.6	678.8	691.1	699.7
70°	619.8	605.0	594.0	594.0	592.7
72.5°	530.0	516.5	514.0	490.7	475.9
75°	441.5	429.2	421.8	376.3	356.6
77.5°	349.2	345.6	322.2	274.2	268.1
80°	260.7	263.2	221.4	222.6	227.5
82.5°	179.5	175.9	166.0	158.6	156.2
85°	103.3	97.1	97.1	92.2	89.8
87.5°	34.4	38.1	38.1	38.1	39.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)