

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: P238831

Luminaire Tested: **22EN-LD2-19-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238831
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-118-11)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22EN-LD2-19-UNV-L940-CD1-U
Description: METALUX ENCOUNTER 2X2 LED TROFFER
STANDARD OPTION
Light Source: (168)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1883.6 lumens
Efficiency: N/A
Efficacy: 114.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')
CIE Type: Direct

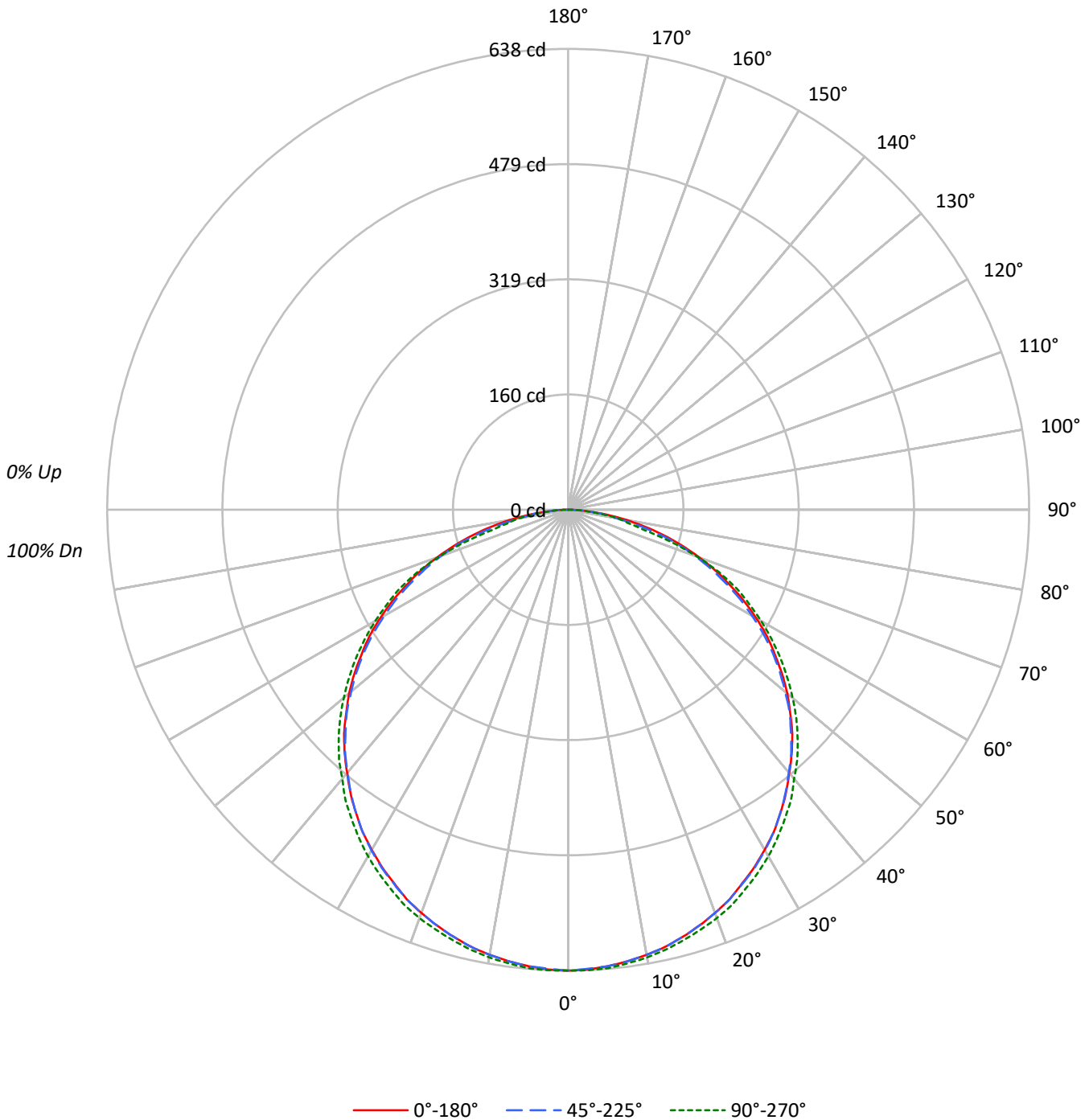
Input Watts (W): 16.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	99	95	106	101	98	94	97	94	91	93	91	88	90	88	86	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	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	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2044	2044	2044
5°	2039	2039	2048
10°	2035	2035	2047
15°	2030	2030	2046
20°	2025	2025	2051
25°	2016	2019	2049
30°	2011	2014	2049
35°	2002	2002	2044
40°	1990	1986	2033
45°	1987	1974	2034
50°	1972	1953	2020
55°	1949	1928	2002
60°	1924	1882	1973
65°	1872	1822	1944
70°	1804	1750	1777
75°	1699	1594	1357
80°	1496	1249	1302
85°	1088	1051	1018



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.3	3.2
10°-20°	173.2	9.2
20°-30°	264.4	14.0
30°-40°	322.1	17.1
40°-50°	339.0	18.0
50°-60°	312.1	16.6
60°-70°	242.9	12.9
70°-80°	134.8	7.2
80°-90°	34.6	1.8
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°	498.0	26.4
0°-40°	820.0	43.5
0°-60°	1471.2	78.1
0°-90°	1883.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1883.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	638	638	638	638	638	
5°	634	634	634	636	637	60
15°	612	612	612	615	617	173
25°	570	571	571	576	580	263
35°	512	512	512	518	523	321
45°	439	436	436	443	449	338
55°	349	348	345	351	359	312
65°	247	244	240	248	257	245
75°	137	134	129	114	110	145
85°	30	28	29	28	28	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	638.1	638.1	638.1	638.1	638.1
2.5°	637.1	636.2	636.2	638.1	638.1
5°	634.3	634.3	634.3	636.2	637.1
7.5°	630.4	630.4	630.4	633.3	633.3
10°	625.7	624.7	625.7	627.6	629.5
12.5°	620.0	619.0	620.0	621.9	623.8
15°	612.3	612.3	612.3	615.2	617.1
17.5°	603.7	602.8	603.7	606.6	609.5
20°	594.2	594.2	594.2	598.0	601.8
22.5°	583.7	582.8	583.7	588.5	592.3
25°	570.4	571.3	571.3	576.1	579.9
27.5°	558.0	557.0	558.9	562.7	567.5
30°	543.7	543.7	544.6	549.4	554.1
32.5°	529.3	528.4	529.3	534.1	538.9
35°	512.2	512.2	512.2	517.9	522.7
37.5°	495.0	494.1	494.1	499.8	506.5
40°	475.9	475.0	475.0	481.7	486.4
42.5°	457.8	456.9	456.9	462.6	469.3
45°	438.7	435.9	435.9	442.6	449.2
47.5°	416.8	414.9	415.8	421.6	428.2
50°	395.8	393.0	392.0	398.7	405.4
52.5°	372.9	372.0	369.1	374.8	382.5
55°	349.1	348.1	345.3	351.0	358.6
57.5°	326.2	323.3	320.5	325.2	333.8
60°	300.4	297.6	293.8	300.4	308.1
62.5°	274.7	270.9	268.0	273.7	282.3
65°	247.0	244.2	240.4	248.0	256.6
67.5°	221.3	218.4	213.6	220.3	226.0
70°	192.7	188.8	186.9	187.9	189.8
72.5°	165.0	163.1	160.2	152.6	150.7
75°	137.3	134.5	128.8	114.5	109.7
77.5°	109.7	107.8	97.3	84.9	84.9
80°	81.1	80.1	67.7	69.6	70.6
82.5°	55.3	53.4	49.6	48.6	48.6
85°	29.6	27.7	28.6	27.7	27.7
87.5°	11.4	11.4	12.4	11.4	11.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)