

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: INVUE

Report Number: P184488

Luminaire Tested: **312EN-LD2-25-UNV-L840-CD1-U**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P184488
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34485)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: 312EN-LD2-25-UNV-L840-CD1-U
Description: METALUX ENCOUNTER 300X1200 TROFFER

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

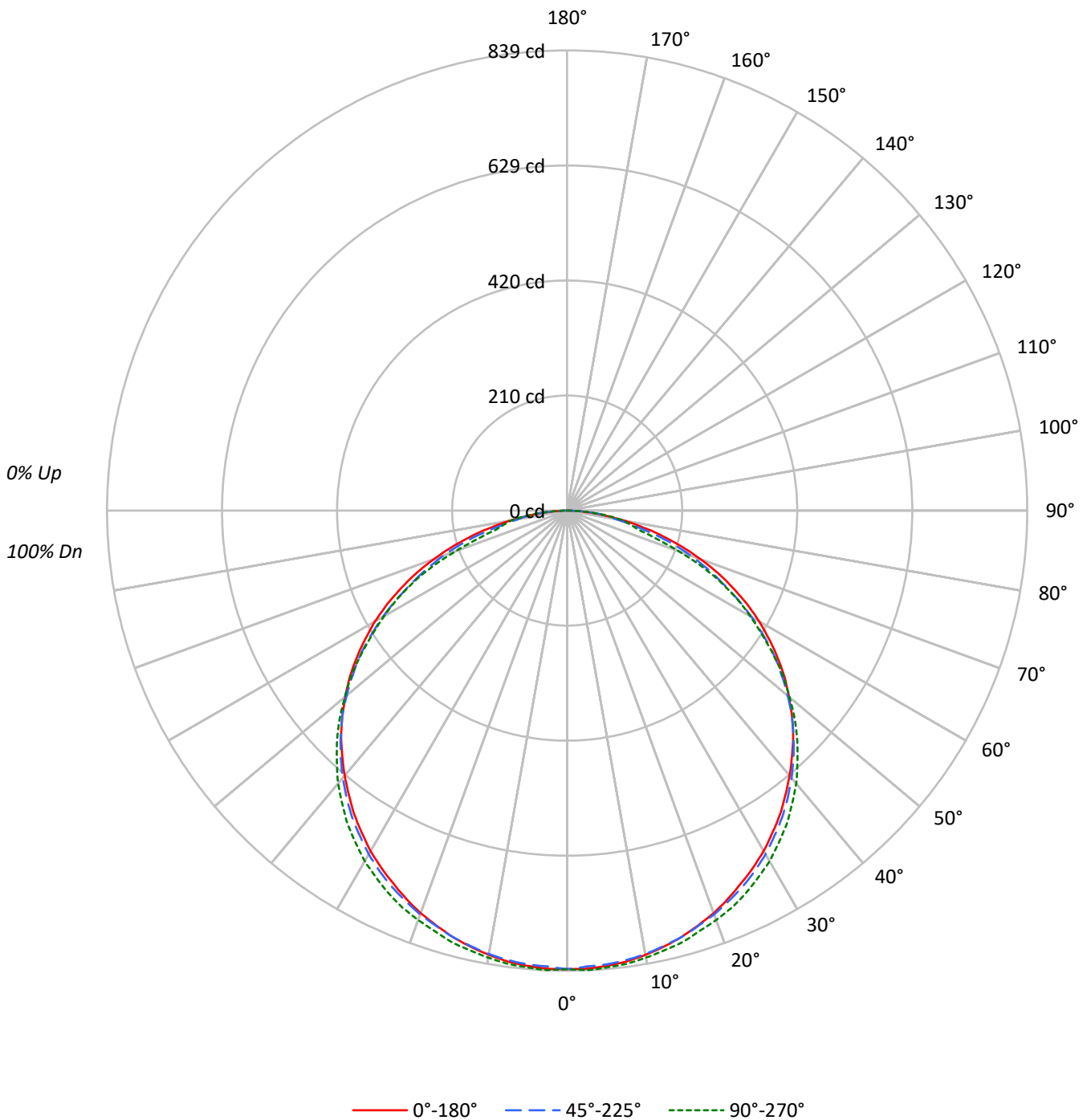
Lumens per Lamp: N/A
Luminaire Lumens: 2485.9 lumens
Efficiency: N/A
Efficacy: 118.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.41
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 20.9
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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
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	41	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	55	42	34	28	41	33	28	40	33	28	39	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°	2250	2250	2250
5°	2251	2244	2258
10°	2248	2244	2262
15°	2243	2243	2269
20°	2237	2244	2275
25°	2227	2247	2287
30°	2227	2248	2294
35°	2223	2245	2293
40°	2217	2236	2283
45°	2218	2223	2259
50°	2210	2199	2215
55°	2200	2162	2156
60°	2178	2091	2076
65°	2124	1988	1971
70°	2035	1887	1697
75°	1881	1672	1393
80°	1640	1412	1599
85°	1241	1488	1448



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.2	3.2
10°-20°	228.1	9.2
20°-30°	349.8	14.1
30°-40°	428.4	17.2
40°-50°	451.7	18.2
50°-60°	412.6	16.6
60°-70°	313.5	12.6
70°-80°	171.2	6.9
80°-90°	51.4	2.1
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°	657.1	26.4
0°-40°	1085.6	43.7
0°-60°	1949.9	78.4
0°-90°	2485.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2485.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	836	836	836	836	836	
5°	833	833	831	835	836	79
15°	805	805	805	812	814	227
25°	750	752	757	766	770	346
35°	677	677	683	693	698	423
45°	583	583	584	590	594	449
55°	469	468	461	457	460	419
65°	334	327	312	310	310	330
75°	181	174	161	138	134	191
85°	40	43	48	47	47	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	836.0	836.0	836.0	836.0	836.0
2.5°	836.0	836.0	832.0	836.0	838.7
5°	833.3	833.3	830.6	834.6	836.0
7.5°	829.3	829.3	826.6	830.6	833.3
10°	822.6	822.6	821.2	825.3	827.9
12.5°	814.5	814.5	813.2	818.6	821.2
15°	805.2	805.2	805.2	811.9	814.5
17.5°	793.1	794.4	794.4	801.1	803.8
20°	781.0	782.4	783.7	791.8	794.4
22.5°	766.3	766.3	770.3	779.7	783.7
25°	750.2	751.6	756.9	766.3	770.3
27.5°	734.2	735.5	740.9	750.2	754.3
30°	716.7	718.1	723.4	732.8	738.2
32.5°	696.6	698.0	703.3	714.1	718.1
35°	676.6	676.6	683.3	692.6	698.0
37.5°	653.8	655.1	660.5	669.9	673.9
40°	631.0	632.3	636.4	644.4	649.8
42.5°	606.9	608.2	610.9	617.6	621.6
45°	582.8	582.8	584.1	589.5	593.5
47.5°	556.0	556.0	556.0	558.7	562.7
50°	527.8	527.8	525.2	526.5	529.2
52.5°	499.7	498.4	493.0	493.0	497.0
55°	468.9	467.6	460.9	456.8	459.5
57.5°	436.7	434.1	424.7	420.7	422.0
60°	404.6	400.6	388.5	383.2	385.8
62.5°	369.8	365.7	351.0	347.0	349.7
65°	333.6	326.9	312.2	309.5	309.5
67.5°	297.4	289.4	276.0	269.3	265.3
70°	258.6	250.5	239.8	223.7	215.7
72.5°	219.7	213.0	202.3	178.2	170.1
75°	180.9	174.2	160.8	138.0	134.0
77.5°	142.0	138.0	120.6	113.9	117.9
80°	105.8	105.8	91.1	99.1	103.2
82.5°	71.0	68.3	75.0	76.4	76.4
85°	40.2	42.9	48.2	46.9	46.9
87.5°	17.4	20.1	21.4	20.1	20.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)