

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: P35233

Luminaire Tested: **14EN-LD2-33HP-UNV-L835-CD1-U**

Test Date: 10/08/16

Test Information

Test Method: LM-79-08
Report Number: P35233
Test Lab: INNOVATION CENTER-P3
Test Date: 10/08/16
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-33HP-UNV-L835-CD1-U
Description: ENCOUNTER 1X4 LED TROFFER
Light Source: (392) EATON 3500K LEDS
EL232N098E835
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER @ 620 mA
OT50W/PRG1400C/UNV/DIM/L

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3383.0 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Spacing Criteria (0/90/45): 1.45 / 1.4 / 1.42
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

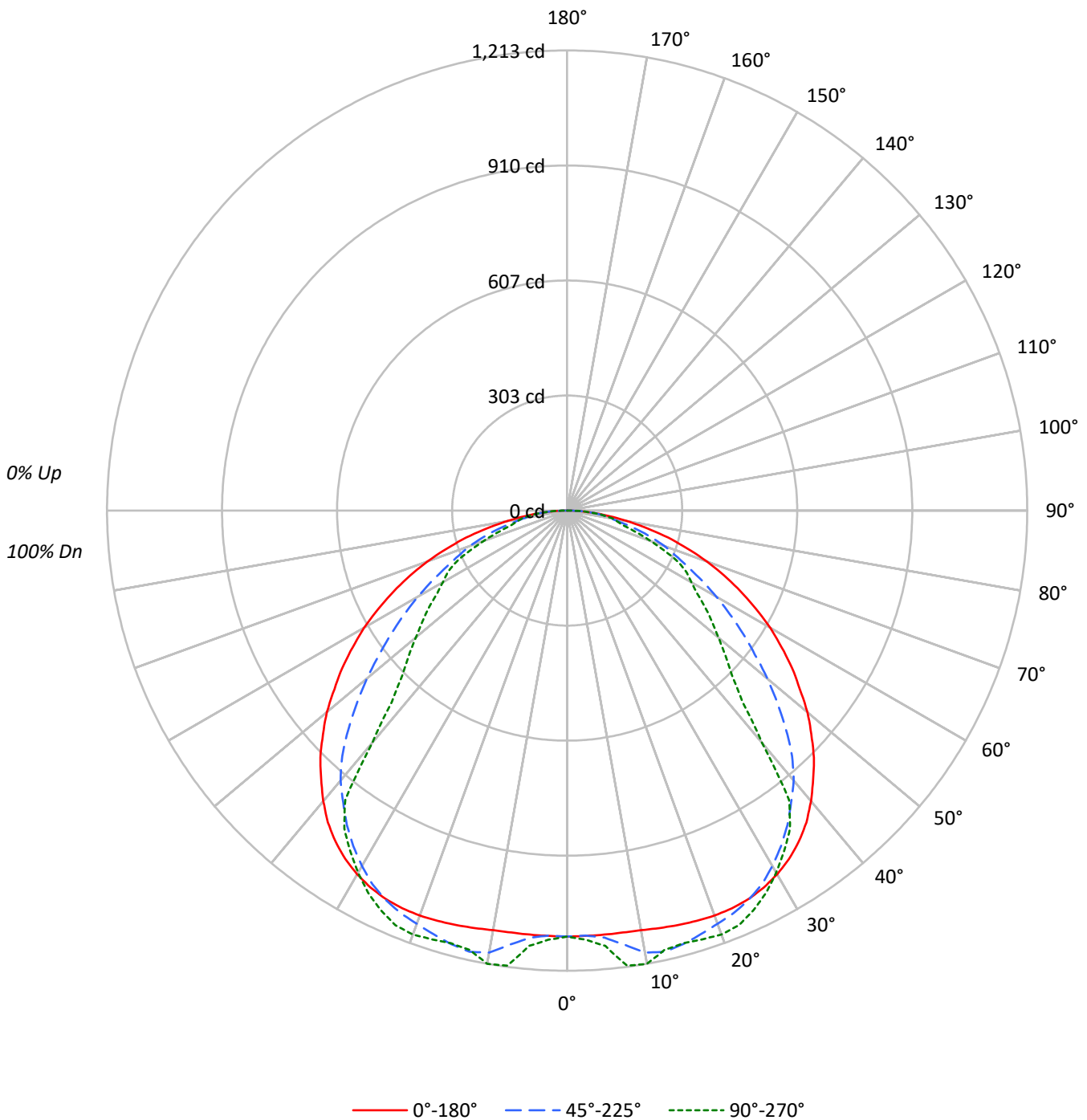
Input Watts (W): 27.4
Input Voltage (V): 120.0
Input Current (Ain): 0.230
Voltage Rise (V): NR
Power Factor: 0.9971
Total Harmonic Distortion (THDi): 8.20%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 5 HR
Ambient Temperature (°C): 24.5
Test Distance: 25 FT



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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	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					100			
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84					84			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70					70			
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60					60			
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51					51			
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44					44			
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39					39			
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34					34			
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28					28			
10	54	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3784	3784	3784
5°	3795	3822	3897
10°	3842	4048	4150
15°	3945	4127	4120
20°	4073	4156	4264
25°	4201	4209	4320
30°	4307	4210	4288
35°	4381	4163	4212
40°	4399	4086	3515
45°	4384	3888	2926
50°	4335	3612	2726
55°	4253	3325	2608
60°	4165	3060	2547
65°	4026	2791	2591
70°	3852	2680	2305
75°	3593	2435	2018
80°	3124	2212	2367
85°	2668	2629	2590



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.9	3.2
10°-20°	331.2	9.8
20°-30°	525.1	15.5
30°-40°	638.5	18.9
40°-50°	609.1	18.0
50°-60°	509.0	15.0
60°-70°	375.7	11.1
70°-80°	212.4	6.3
80°-90°	72.0	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°	966.2	28.6
0°-40°	1604.8	47.4
0°-60°	2722.9	80.5
0°-90°	3383.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3383.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1123	1123	1123	1123	1123	
5°	1122	1125	1130	1144	1152	107
15°	1131	1158	1183	1178	1181	321
25°	1130	1131	1132	1156	1162	521
35°	1065	1030	1012	1024	1024	665
45°	920	860	816	708	614	708
55°	724	652	566	469	444	646
65°	505	435	350	319	325	499
75°	276	223	187	160	155	290
85°	69	62	68	67	67	80
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1123	1123	1123	1123	1123
2.5°	1122	1123	1121	1127	1132
5°	1122	1125	1130	1144	1152
7.5°	1122	1131	1154	1190	1210
10°	1123	1143	1183	1213	1213
12.5°	1127	1152	1191	1190	1186
15°	1131	1158	1183	1178	1181
17.5°	1134	1157	1171	1176	1185
20°	1136	1152	1159	1177	1189
22.5°	1135	1143	1148	1172	1183
25°	1130	1131	1132	1156	1162
27.5°	1121	1114	1111	1130	1136
30°	1107	1091	1082	1097	1102
32.5°	1089	1065	1049	1061	1064
35°	1065	1030	1012	1024	1024
37.5°	1036	994	970	974	961
40°	1000	952	929	880	799
42.5°	960	906	878	787	684
45°	920	860	816	708	614
47.5°	873	809	752	635	566
50°	827	759	689	573	520
52.5°	773	709	624	519	481
55°	724	652	566	469	444
57.5°	670	600	509	424	406
60°	618	545	454	384	378
62.5°	561	491	401	351	356
65°	505	435	350	319	325
67.5°	448	382	309	284	280
70°	391	326	272	239	234
72.5°	331	276	231	197	192
75°	276	223	187	160	155
77.5°	216	181	146	134	137
80°	161	143	114	118	122
82.5°	113	96	95	98	97
85°	69	62	68	67	67
87.5°	32	34	36	36	37
90°	0	0	0	0	0

(END OF REPORT)