

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: P184160

Luminaire Tested: **24FR-30-HP-UNV-L835-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P184160
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27148)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24FR-30-HP-UNV-L835-CD1-U
Description: METALUX 2X4 FR TROFFER LED HIGH EFFICIENCY FIXTURE

Light Source: EATON LED 3500K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

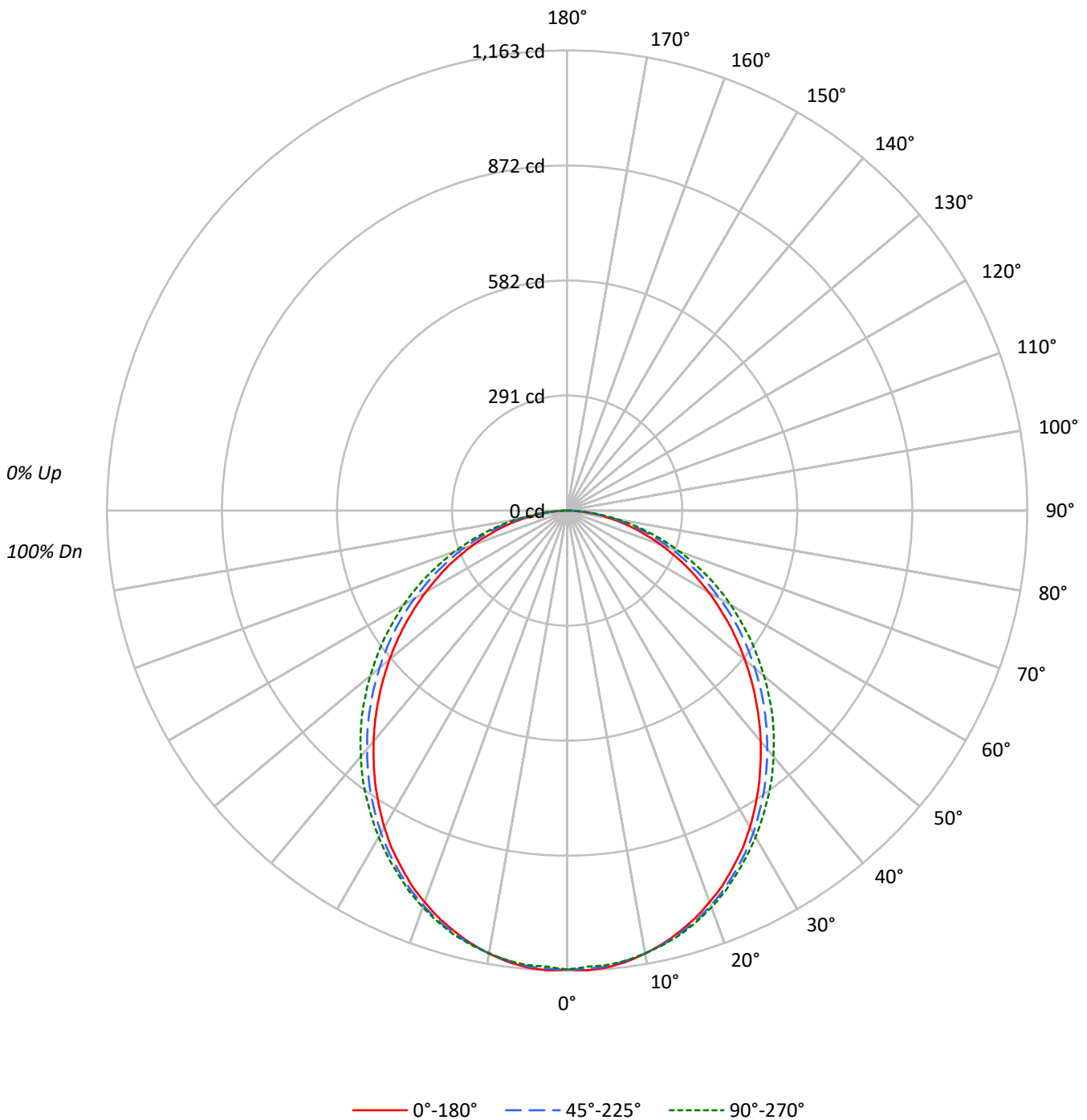
Lumens per Lamp: N/A
Luminaire Lumens: 3067.1 lumens
Efficiency: N/A
Efficacy: 134.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.22 / 1.32
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 22.8
Input Voltage (V): NR
Input Current (A_{in}): 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	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	94	98	94	91	94	91	89	90	88	86	84					84			
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	75	72	70					70			
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	61	59					59			
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51					51			
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44					44			
6	71	57	48	42	69	56	48	42	55	47	41	53	46	41	51	45	41	39					39			
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34					34			
8	61	48	39	33	59	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	29	28					28			
10	53	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°	1561	1561	1561
5°	1565	1561	1557
10°	1553	1552	1552
15°	1534	1539	1545
20°	1508	1521	1528
25°	1474	1493	1504
30°	1436	1462	1481
35°	1388	1424	1454
40°	1337	1382	1424
45°	1282	1340	1397
50°	1227	1296	1361
55°	1171	1253	1325
60°	1111	1200	1286
65°	1054	1146	1242
70°	987	1094	1188
75°	915	1035	1118
80°	837	961	1023
85°	756	818	818



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.5	3.6
10°-20°	311.2	10.1
20°-30°	461.9	15.1
30°-40°	540.6	17.6
40°-50°	542.6	17.7
50°-60°	475.2	15.5
60°-70°	356.7	11.6
70°-80°	209.6	6.8
80°-90°	59.8	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°	882.6	28.8
0°-40°	1423.2	46.4
0°-60°	2441.0	79.6
0°-90°	3067.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3067.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1160	1160	1160	1160	1160	
5°	1159	1151	1156	1154	1153	110
15°	1101	1097	1105	1108	1109	310
25°	993	993	1006	1009	1013	457
35°	845	848	867	878	885	528
45°	674	682	704	723	734	520
55°	499	508	534	553	565	446
65°	331	340	360	379	390	328
75°	176	186	199	209	215	187
85°	49	52	53	53	53	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1160	1160	1160	1160	1160
2.5°	1163	1156	1159	1158	1154
5°	1159	1151	1156	1154	1153
7.5°	1150	1142	1147	1147	1147
10°	1137	1131	1136	1136	1136
12.5°	1121	1116	1123	1124	1124
15°	1101	1097	1105	1108	1109
17.5°	1079	1076	1086	1089	1089
20°	1053	1051	1062	1065	1067
22.5°	1026	1023	1036	1038	1042
25°	993	993	1006	1009	1013
27.5°	961	960	975	980	984
30°	924	924	941	948	953
32.5°	885	888	904	913	919
35°	845	848	867	878	885
37.5°	803	808	827	841	850
40°	761	768	787	803	811
42.5°	718	724	746	764	773
45°	674	682	704	723	734
47.5°	630	640	662	683	691
50°	586	595	619	640	650
52.5°	542	551	576	596	606
55°	499	508	534	553	565
57.5°	455	465	490	510	519
60°	413	422	446	466	478
62.5°	371	381	402	423	434
65°	331	340	360	379	390
67.5°	290	301	318	337	345
70°	251	263	278	294	302
72.5°	213	224	238	251	258
75°	176	186	199	209	215
77.5°	141	152	161	170	173
80°	108	117	124	130	132
82.5°	78	84	87	92	93
85°	49	52	53	53	53
87.5°	21	22	20	16	15
90°	0	0	0	0	0

(END OF REPORT)