

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: P393548

Luminaire Tested: **24EN-LD2-49-UNV-L83050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393548
Test Lab: INNOVATION CENTER (G3)
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-49-UNV-L83050-W2A-1-U (3500K)
Description: 2X4 ENCOUNTER, 4900 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4942.1 lumens
Efficiency: N/A
Efficacy: 140.8 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

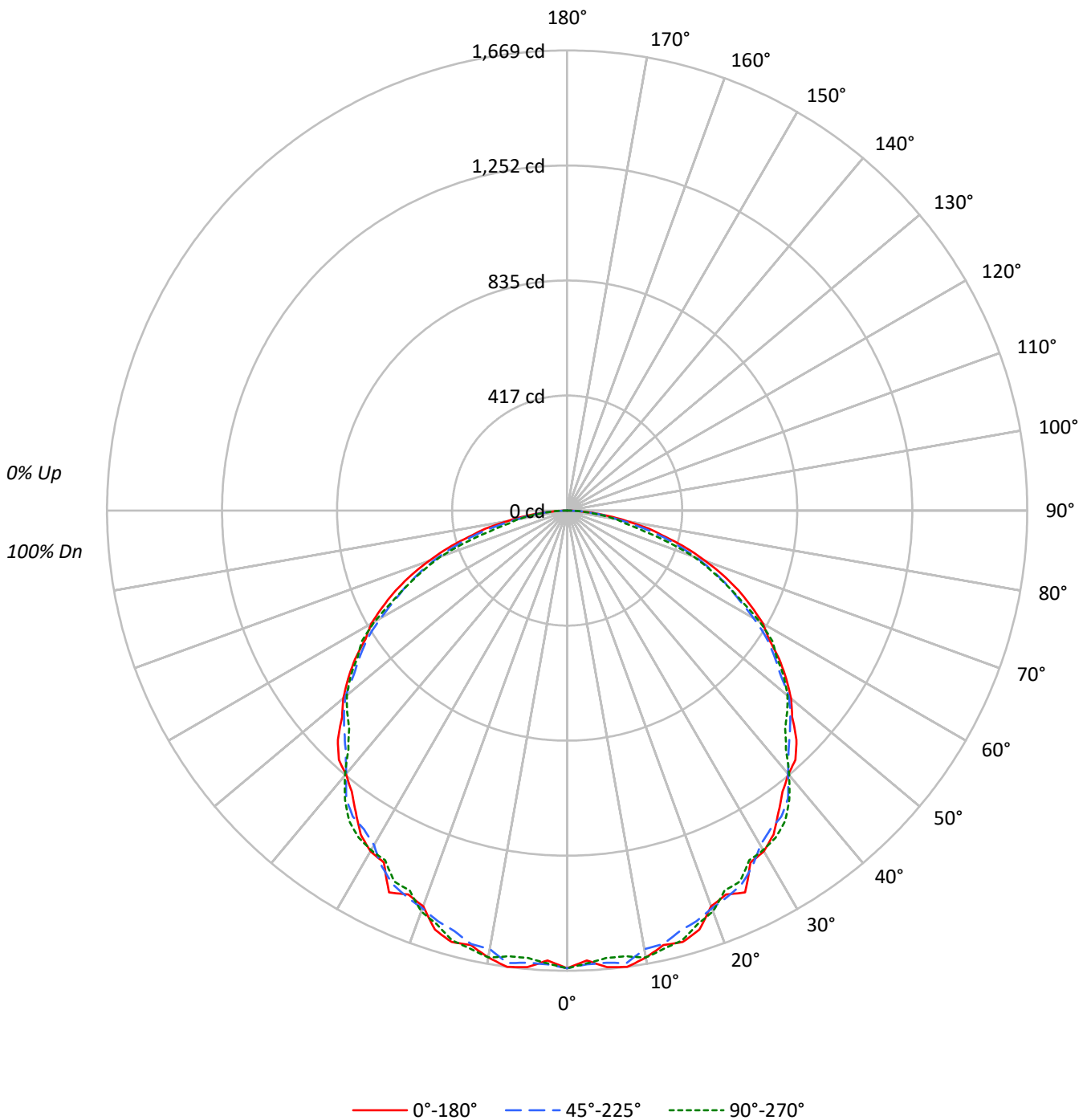
Input Watts (W): 35.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83					83			
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69					69			
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32					32			
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29					29			
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2234	2234	2234
5°	2245	2223	2200
10°	2249	2206	2249
15°	2257	2199	2247
20°	2186	2198	2215
25°	2268	2221	2203
30°	2217	2177	2209
35°	2194	2226	2262
40°	2192	2188	2201
45°	2238	2173	2127
50°	2219	2198	2183
55°	2203	2149	2177
60°	2207	2104	2172
65°	2184	2041	2025
70°	2093	1963	1920
75°	1918	1809	1508
80°	1697	1433	1387
85°	1405	1266	1173



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.2	3.2
10°-20°	451.2	9.1
20°-30°	683.7	13.8
30°-40°	841.7	17.0
40°-50°	885.4	17.9
50°-60°	823.8	16.7
60°-70°	643.8	13.0
70°-80°	360.8	7.3
80°-90°	95.5	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°	1291.1	26.1
0°-40°	2132.8	43.2
0°-60°	3841.9	77.7
0°-90°	4942.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4942.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1660	1660	1660	1660	1660	
5°	1662	1644	1646	1621	1629	158
15°	1620	1601	1579	1596	1613	453
25°	1528	1475	1496	1464	1484	687
35°	1336	1352	1355	1334	1377	838
45°	1176	1164	1142	1143	1118	901
55°	939	932	916	914	928	838
65°	686	666	641	645	636	675
75°	369	361	348	307	290	396
85°	91	82	82	74	76	105
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1660	1660	1660	1660	1660
2.5°	1633	1665	1647	1668	1644
5°	1662	1644	1646	1621	1629
7.5°	1669	1602	1655	1628	1630
10°	1646	1616	1615	1614	1646
12.5°	1614	1626	1610	1595	1627
15°	1620	1601	1579	1596	1613
17.5°	1594	1585	1561	1605	1573
20°	1527	1562	1535	1559	1547
22.5°	1507	1536	1517	1532	1492
25°	1528	1475	1496	1464	1484
27.5°	1439	1429	1455	1444	1430
30°	1427	1411	1401	1402	1422
32.5°	1393	1376	1371	1380	1407
35°	1336	1352	1355	1334	1377
37.5°	1284	1296	1316	1315	1324
40°	1248	1269	1246	1256	1253
42.5°	1226	1207	1188	1194	1175
45°	1176	1164	1142	1143	1118
47.5°	1107	1092	1098	1081	1082
50°	1060	1034	1050	1018	1043
52.5°	1001	990	974	964	991
55°	939	932	916	914	928
57.5°	867	861	856	855	883
60°	820	797	782	778	807
62.5°	754	744	704	713	716
65°	686	666	641	645	636
67.5°	613	577	571	572	562
70°	532	511	499	492	488
72.5°	455	438	424	406	388
75°	369	361	348	307	290
77.5°	303	294	266	221	218
80°	219	224	185	178	179
82.5°	155	151	138	129	124
85°	91	82	82	74	76
87.5°	30	34	34	33	32
90°	0	0	0	0	0

(END OF REPORT)