

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: P393685

Luminaire Tested: **24EN-LD2-70-UNV-L92765-W2A-1-U (4000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393685  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-39)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24EN-LD2-70-UNV-L92765-W2A-1-U (4000K)  
Description: 2X4 ENCOUNTER, 7000 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5799.5 lumens  
Efficiency: N/A  
Efficacy: 113.1 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

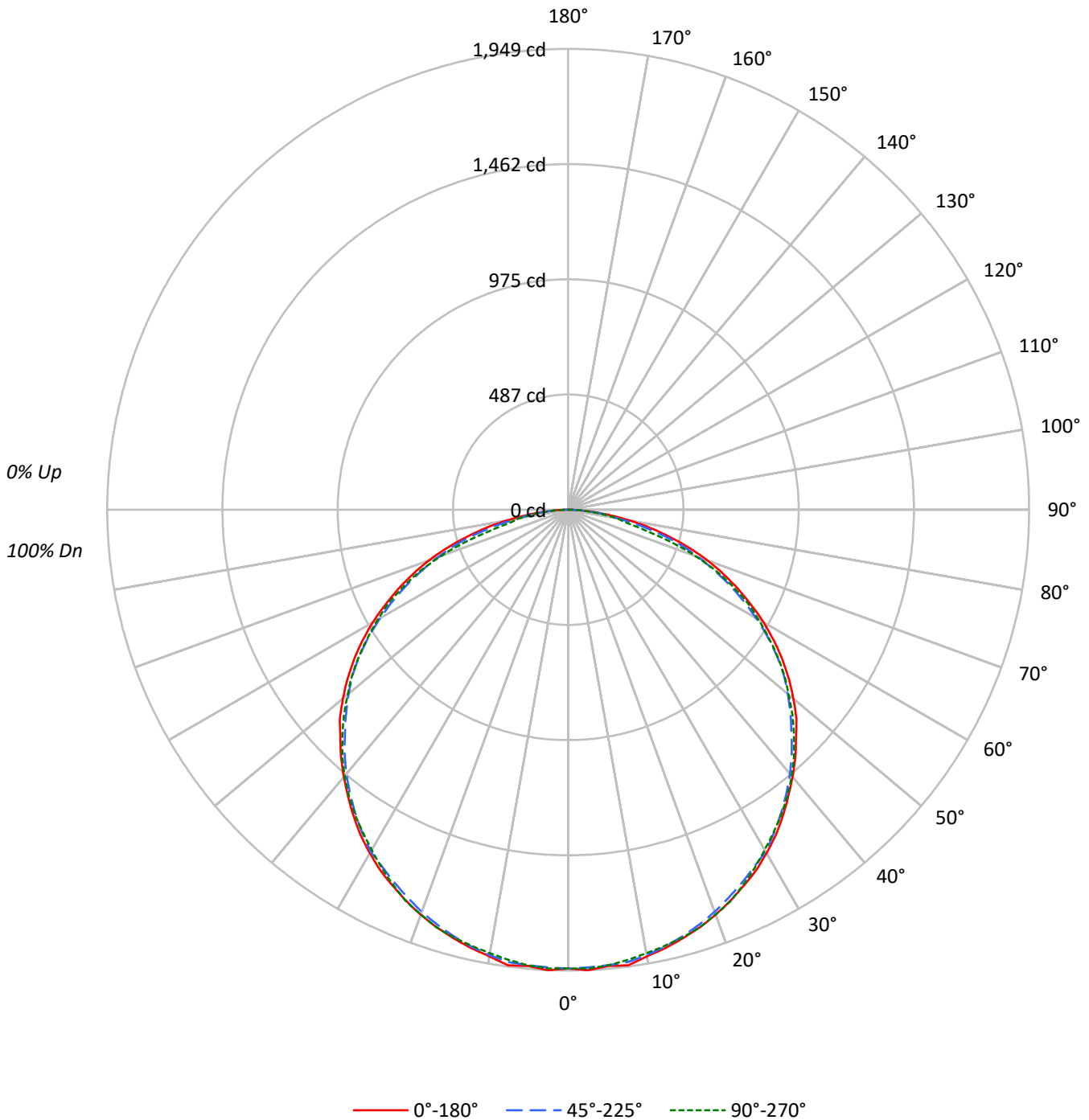
Input Watts (W): 51.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2611	2611	2611
5°	2616	2612	2613
10°	2620	2613	2602
15°	2613	2602	2608
20°	2610	2591	2609
25°	2605	2582	2599
30°	2606	2594	2581
35°	2599	2577	2582
40°	2591	2562	2581
45°	2592	2540	2568
50°	2602	2538	2547
55°	2594	2526	2532
60°	2568	2468	2502
65°	2520	2396	2446
70°	2463	2300	2248
75°	2313	2128	1750
80°	2051	1660	1621
85°	1635	1494	1379



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.0	3.2
10°-20°	527.6	9.1
20°-30°	805.6	13.9
30°-40°	983.2	17.0
40°-50°	1039.3	17.9
50°-60°	966.6	16.7
60°-70°	756.4	13.0
70°-80°	424.4	7.3
80°-90°	112.6	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°	1517.1	26.2
0°-40°	2500.3	43.1
0°-60°	4506.2	77.7
0°-90°	5799.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5799.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1940	1940	1940	1940	1940	
5°	1937	1934	1934	1932	1934	185
15°	1876	1870	1868	1860	1872	530
25°	1755	1746	1739	1749	1751	810
35°	1582	1576	1569	1563	1572	990
45°	1362	1351	1335	1343	1350	1053
55°	1106	1091	1077	1072	1079	987
65°	792	774	753	757	768	783
75°	445	428	409	361	337	470
85°	106	98	97	90	89	124
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1940.2	1940.2	1940.2	1940.2	1940.2
2.5°	1949.3	1936.9	1937.7	1941.9	1941.9
5°	1936.9	1934.4	1933.6	1932.0	1934.4
7.5°	1943.5	1927.0	1929.5	1919.6	1920.4
10°	1917.9	1911.3	1912.9	1905.5	1904.7
12.5°	1898.9	1896.4	1892.3	1884.8	1889.0
15°	1875.7	1869.9	1868.3	1860.0	1872.4
17.5°	1851.7	1842.6	1840.2	1835.2	1851.7
20°	1822.8	1814.5	1809.6	1808.7	1822.0
22.5°	1790.5	1782.3	1774.8	1780.6	1792.2
25°	1755.0	1745.9	1739.3	1749.2	1750.8
27.5°	1720.2	1709.5	1702.9	1708.7	1707.8
30°	1677.2	1668.1	1669.8	1664.0	1661.5
32.5°	1632.6	1624.3	1620.2	1614.4	1616.9
35°	1582.1	1575.5	1568.9	1563.1	1572.2
37.5°	1528.4	1524.2	1515.1	1509.3	1523.4
40°	1475.4	1466.3	1458.9	1454.8	1469.6
42.5°	1421.7	1411.8	1398.5	1397.7	1413.4
45°	1362.1	1351.4	1334.8	1343.1	1349.7
47.5°	1309.2	1291.8	1273.6	1281.9	1286.0
50°	1243.0	1229.0	1212.4	1215.7	1216.6
52.5°	1176.0	1164.5	1148.8	1144.6	1152.1
55°	1105.7	1090.9	1076.8	1071.8	1079.3
57.5°	1031.3	1018.1	999.9	993.3	1003.2
60°	954.4	937.0	917.2	917.2	929.6
62.5°	873.4	859.3	835.3	838.6	856.8
65°	791.5	774.1	752.6	756.7	768.3
67.5°	709.6	692.2	666.6	672.4	677.3
70°	626.1	604.6	584.7	578.9	571.5
72.5°	535.9	516.1	502.8	471.4	459.0
75°	444.9	428.4	409.4	361.4	336.6
77.5°	355.6	344.9	314.3	258.0	248.1
80°	264.7	259.7	214.2	210.1	209.2
82.5°	180.3	177.0	162.9	151.3	148.9
85°	105.9	98.4	96.8	90.1	89.3
87.5°	36.4	39.7	38.9	39.7	38.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)