

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: P192406

Luminaire Tested: **4WSL-LD2-40-UNV-L835-CD1-U**

Issue Date: 3/3/2020



**Test Information**

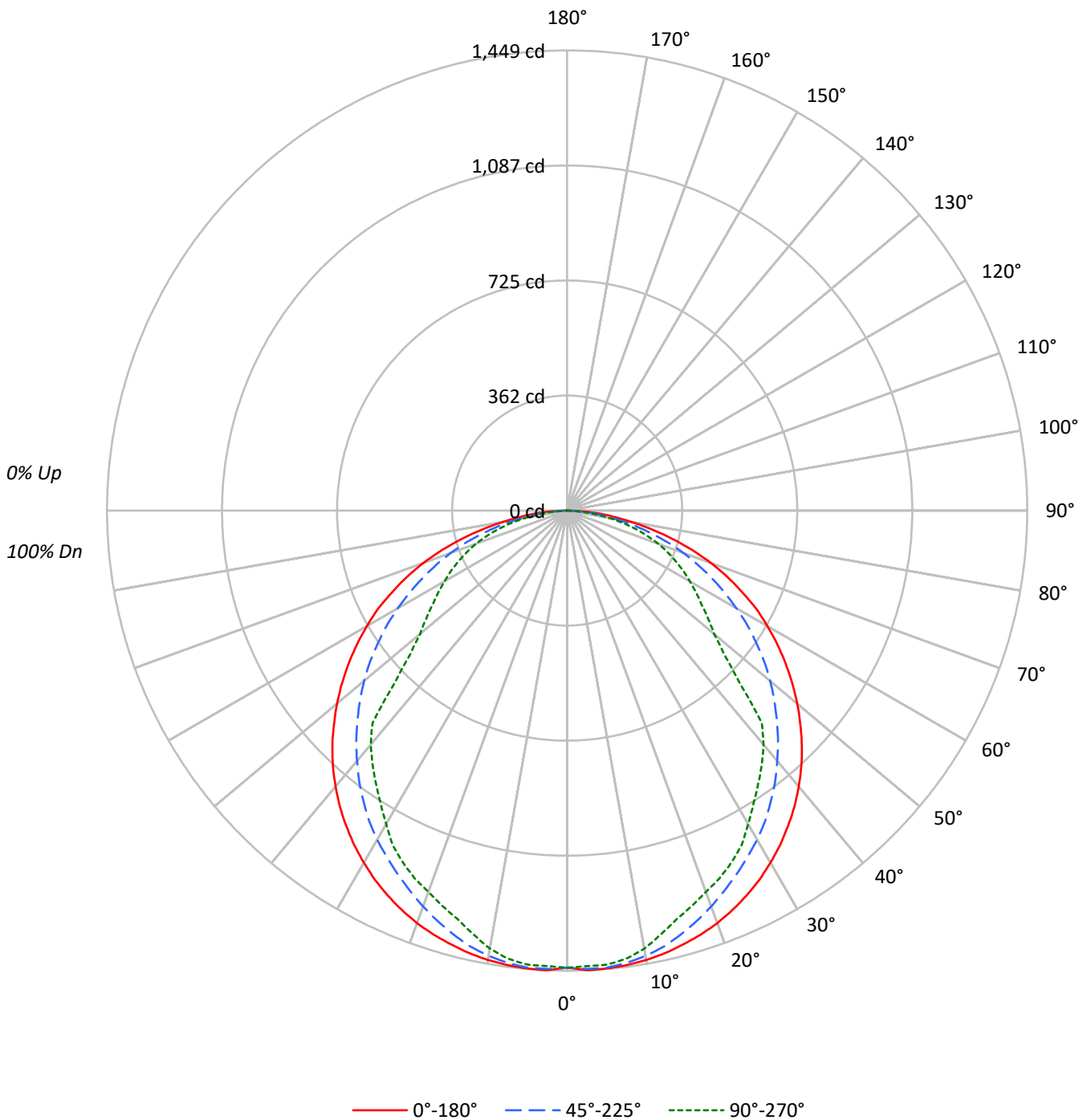
Test Method: LM-79-08  
Report Number: P192406  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P28104)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4WSL-LD2-40-UNV-L835-CD1-U  
Description: 4FT Linear Wavestream System, L835  
Light Source: (238) 3500K CCT, 80 CRI LEDS  
EL236N0119D835  
Ballast/Driver: OSRAM  
OT50W

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4010.0 lumens  
Efficiency: N/A  
Efficacy: 114.2 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 1.18 / 1.35  
Luminous Opening: Rectangular (W 0.5' x L: 3.8' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 35.1  
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	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	97	94	91	93	91	88	90	88	86	84					84			
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70					70			
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59					59			
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50					50			
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43					43			
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	38					38			
7	65	51	43	36	63	51	42	36	49	42	36	48	41	36	46	40	35	33					33			
8	60	47	38	33	59	46	38	32	45	37	32	44	37	32	42	36	32	30					30			
9	57	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	27					27			
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	8155	8155	8155
5°	8231	8216	8163
10°	8265	8189	8059
15°	8294	8107	7812
20°	8334	7998	7702
25°	8359	7894	7645
30°	8375	7828	7455
35°	8386	7734	7258
40°	8389	7614	7113
45°	8376	7482	6154
50°	8337	7354	5331
55°	8295	7181	5110
60°	8252	6975	5050
65°	8145	6723	5051
70°	7977	6460	5054
75°	7462	5954	4907
80°	6665	5151	4372
85°	6123	3965	3192



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.7	3.4
10°-20°	388.1	9.7
20°-30°	585.0	14.6
30°-40°	702.4	17.5
40°-50°	715.3	17.8
50°-60°	627.8	15.7
60°-70°	488.3	12.2
70°-80°	290.4	7.2
80°-90°	76.0	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°	1109.8	27.7
0°-40°	1812.1	45.2
0°-60°	3155.2	78.7
0°-90°	4010.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4010.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1439	1439	1439	1439	1439	
5°	1447	1434	1445	1439	1435	138
15°	1414	1394	1382	1348	1332	400
25°	1337	1307	1263	1230	1223	617
35°	1212	1174	1118	1065	1049	759
45°	1045	1011	934	862	768	806
55°	840	814	727	582	517	751
65°	608	584	502	395	377	602
75°	341	324	272	220	224	360
85°	94	84	61	49	49	103
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1439.4	1439.4	1439.4	1439.4	1439.4
2.5°	1448.7	1434.1	1444.7	1442.0	1435.4
5°	1447.3	1434.1	1444.7	1439.4	1435.4
7.5°	1443.4	1430.1	1436.7	1428.8	1423.5
10°	1436.7	1422.1	1423.5	1410.2	1400.9
12.5°	1427.4	1410.2	1406.2	1379.7	1366.4
15°	1414.2	1394.3	1382.3	1347.9	1331.9
17.5°	1399.6	1377.0	1355.8	1317.3	1305.4
20°	1382.3	1355.8	1326.6	1286.8	1277.5
22.5°	1361.1	1333.3	1294.8	1259.0	1253.7
25°	1337.2	1306.7	1262.9	1229.8	1223.1
27.5°	1310.7	1274.9	1229.8	1196.6	1188.7
30°	1280.2	1243.0	1196.6	1158.1	1139.6
32.5°	1248.4	1209.9	1159.5	1110.4	1093.1
35°	1212.5	1174.1	1118.3	1065.3	1049.4
37.5°	1175.4	1135.6	1075.9	1020.2	1006.9
40°	1134.3	1095.8	1029.5	975.1	961.8
42.5°	1091.8	1054.7	983.0	928.6	907.4
45°	1045.4	1010.9	933.9	862.3	768.1
47.5°	996.3	964.5	884.9	778.7	669.9
50°	945.9	916.7	834.4	704.4	604.9
52.5°	894.1	867.6	782.7	639.4	559.8
55°	839.8	814.5	727.0	582.4	517.4
57.5°	785.4	760.2	673.9	530.7	481.6
60°	728.3	704.4	615.6	482.9	445.7
62.5°	672.6	646.1	558.5	439.1	412.6
65°	607.6	583.7	501.5	395.3	376.8
67.5°	546.6	521.4	445.7	352.9	342.3
70°	481.6	456.4	390.0	309.1	305.1
72.5°	412.6	392.7	331.7	266.7	264.0
75°	340.9	323.7	272.0	220.2	224.2
77.5°	270.6	260.0	214.9	176.4	179.1
80°	204.3	196.3	157.9	131.3	134.0
82.5°	145.9	139.3	107.5	87.6	87.6
85°	94.2	83.6	61.0	49.1	49.1
87.5°	37.1	30.5	18.6	5.3	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)