

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: P231497

Luminaire Tested: **SSLED-LD5-18-W-UNV-L835-CD1-U-CLR22-CLCDL22**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P231497  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-240-6)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: SSLED-LD5-18-W-UNV-L835-CD1-U-CLR22-CLCDL22  
Description: STEELER CLEAR REFRACTOR LENS AND CONICAL DROP  
Light Source: (240) 3500 CCT, 80 CRI LEDS  
Ballast/Driver: (1) ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15724.0 lumens  
Efficiency: N/A  
Efficacy: 117.5 lumens/watt  
Spacing Criteria (0/90/45): 1.63 / 1.67 / 1.65  
Luminous Opening: Vertical Cylinder (Dia: 1.67' x H: 1.17')  
CIE Type: Direct

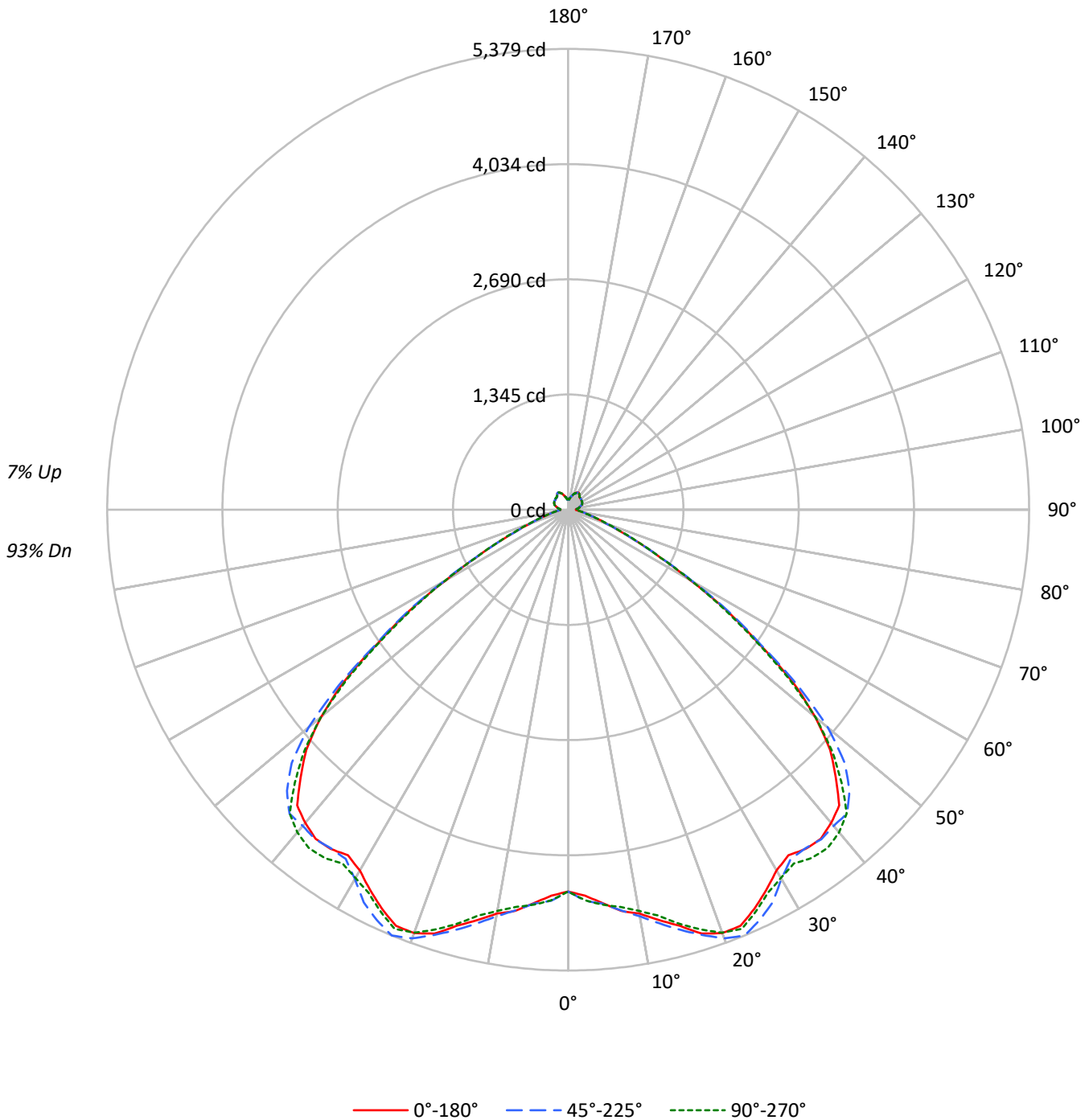
Input Watts (W): 133.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	93								
1	109	105	101	98	105	102	98	95	96	94	91	91	89	87	87	85	84	81								
2	100	93	87	82	97	90	85	80	86	81	77	82	78	75	78	75	72	70								
3	92	82	75	69	89	80	73	68	76	71	66	73	68	64	69	65	62	60								
4	84	73	65	59	81	71	64	58	68	62	57	65	60	55	62	58	54	52								
5	78	66	57	51	75	64	56	50	61	54	49	59	53	48	56	51	47	45								
6	72	59	51	44	69	58	50	44	55	48	43	53	47	42	51	46	41	39								
7	66	53	45	39	64	52	44	39	50	43	38	48	42	37	46	41	37	35								
8	62	49	40	35	60	48	40	34	46	39	34	44	38	33	42	37	33	31								
9	57	44	36	31	56	44	36	31	42	35	30	40	34	30	39	33	29	28								
10	54	41	33	28	52	40	33	28	39	32	27	37	31	27	36	30	27	25								

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

	0°	45°	90°
0°	21983	21983	21983
5°	21172	21208	21264
10°	20722	20860	20583
15°	20735	20940	20625
20°	20845	21107	20828
25°	19767	20327	19907
30°	18290	18714	18672
35°	17924	17892	18397
40°	17588	17751	18116
45°	16290	17119	16646
50°	14003	14717	14010
55°	10219	10364	10094
60°	6399	6560	6452
65°	3605	3601	3674
70°	2004	1967	2094
75°	1197	1208	1227
80°	839	831	835
85°	575	579	575



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	445.9	2.8
10°-20°	1432.9	9.1
20°-30°	2385.3	15.2
30°-40°	3068.3	19.5
40°-50°	3466.8	22.0
50°-60°	2462.1	15.7
60°-70°	949.6	6.0
70°-80°	312.3	2.0
80°-90°	132.9	0.8
90°-100°	113.8	0.7
100°-110°	154.8	1.0
110°-120°	178.0	1.1
120°-130°	169.5	1.1
130°-140°	151.8	1.0
140°-150°	138.3	0.9
150°-160°	100.1	0.6
160°-170°	49.1	0.3
170°-180°	12.4	0.1
0°-30°	4264.1	27.1
0°-40°	7332.4	46.6
0°-60°	13261.3	84.3
0°-90°	14656.1	93.2
90°-120°	446.6	2.8
90°-150°	906.3	5.8
90°-180°	1068.0	6.8
0°-180°	15724.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4456	4456	4456	4456	4456	
5°	4608	4606	4616	4595	4628	446
15°	5029	5052	5078	5036	5002	1435
25°	5140	5114	5286	5152	5177	2362
35°	4833	4836	4824	4916	4960	3027
45°	4416	4484	4640	4554	4512	3379
55°	2700	2769	2738	2734	2667	2429
65°	899	884	898	899	916	943
75°	272	278	274	276	278	312
85°	114	114	114	114	114	107
90°	89	90	90	91	90	50
95°	99	99	100	101	102	87
105°	148	147	142	145	144	156
115°	180	180	180	181	182	178
125°	188	188	190	189	190	169
135°	195	194	195	198	200	151
145°	224	224	224	226	226	138
155°	217	216	209	215	215	101
165°	165	168	168	167	163	48
175°	120	118	118	118	118	12
180°	129	129	129	129	129	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4455.5	4455.5	4455.5	4455.5	4455.5
2.5°	4509.3	4561.4	4568.3	4530.1	4564.0
5°	4608.2	4605.6	4616.0	4595.2	4628.2
7.5°	4723.6	4708.0	4715.8	4689.8	4675.9
10°	4786.1	4782.6	4818.2	4780.9	4754.0
12.5°	4905.8	4898.9	4947.5	4892.0	4852.0
15°	5029.0	5051.6	5078.5	5036.0	5002.1
17.5°	5187.8	5137.5	5204.3	5131.4	5135.8
20°	5258.1	5187.8	5324.1	5198.2	5253.8
22.5°	5257.2	5217.3	5378.7	5185.2	5294.6
25°	5140.1	5114.1	5285.9	5152.3	5176.6
27.5°	5003.9	5053.3	5165.3	5098.5	5042.9
30°	4862.5	5016.9	4975.2	5088.0	4964.0
32.5°	4782.6	4931.0	4833.8	5013.4	4898.0
35°	4833.0	4835.6	4824.3	4916.2	4960.5
37.5°	4841.6	4806.9	4850.3	4873.7	4975.2
40°	4773.1	4792.2	4817.3	4874.6	4916.2
42.5°	4681.1	4702.8	4813.9	4773.1	4809.5
45°	4415.6	4484.1	4640.3	4553.6	4511.9
47.5°	4145.8	4308.0	4378.3	4356.6	4181.3
50°	3762.2	3897.6	3954.0	3941.8	3764.0
52.5°	3300.6	3322.3	3377.0	3332.7	3252.9
55°	2700.2	2768.8	2738.4	2734.0	2667.2
57.5°	2203.0	2242.9	2235.1	2223.9	2147.5
60°	1649.5	1680.7	1691.1	1687.6	1663.3
62.5°	1221.7	1227.8	1232.1	1250.3	1217.3
65°	898.9	884.2	898.0	898.9	916.3
67.5°	643.8	638.6	646.4	650.8	672.4
70°	479.0	472.9	470.3	484.2	500.6
72.5°	367.0	361.8	364.4	370.5	373.1
75°	271.6	277.7	274.2	275.9	278.5
77.5°	216.1	215.2	213.4	214.3	216.9
80°	178.7	177.0	177.0	175.3	177.9
82.5°	142.3	144.0	143.2	144.0	144.0
85°	113.7	114.5	114.5	114.5	113.7
87.5°	95.4	96.3	95.4	97.2	96.3
90°	89.4	90.2	90.2	91.1	90.2
92.5°	91.1	92.8	92.8	94.6	93.7
95°	98.9	98.9	99.8	100.7	101.5
97.5°	112.8	113.7	115.4	116.3	116.3
100°	125.8	127.5	128.4	129.3	131.0
102.5°	133.6	133.6	133.6	135.4	135.4
105°	148.4	146.6	142.3	144.9	144.0
107.5°	158.8	157.0	156.2	158.8	160.5
110°	170.1	168.3	167.5	170.1	171.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	175.3	174.4	174.4	176.1	177.9
115°	180.5	179.6	179.6	181.3	182.2
117.5°	183.1	183.1	184.8	184.8	185.7
120°	183.9	184.8	186.6	186.6	186.6
122.5°	186.6	185.7	188.3	187.4	188.3
125°	188.3	188.3	190.0	189.2	190.0
127.5°	190.0	189.2	190.9	190.9	190.9
130°	191.8	191.8	193.5	193.5	193.5
132.5°	193.5	192.6	194.4	195.2	197.0
135°	195.2	194.4	195.2	197.8	199.6
137.5°	197.0	196.1	196.1	198.7	201.3
140°	199.6	200.4	198.7	201.3	202.2
142.5°	211.7	211.7	209.1	211.7	215.2
145°	223.9	223.9	223.9	225.6	226.5
147.5°	229.9	230.8	231.7	231.7	232.5
150°	231.7	231.7	231.7	231.7	232.5
152.5°	229.1	228.2	223.0	227.3	228.2
155°	216.9	216.1	209.1	215.2	215.2
157.5°	206.5	205.6	198.7	204.8	205.6
160°	198.7	203.0	196.1	202.2	197.8
162.5°	179.6	188.3	183.9	185.7	178.7
165°	164.9	168.3	167.5	166.6	163.1
167.5°	155.3	158.8	157.0	157.9	152.7
170°	145.8	148.4	149.2	146.6	143.2
172.5°	129.3	131.0	133.6	129.3	129.3
175°	119.7	118.0	118.0	118.0	118.0
177.5°	124.1	124.1	124.9	122.3	122.3
180°	129.3	129.3	129.3	129.3	129.3

(END OF REPORT)