

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: AMETRIX

Report Number: P189133

Luminaire Tested: A02-SI-A-1-LED-35K-D-120-S

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2019
Report Number: P189133
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (ITL87330-GONIOPHOTOMETRY)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: AMETRIX
Catalog Number: A02-SI-A-1-LED-35K-D-120-S
Description: ARROWLINEAR LED LUMINAIRE, EXTRA SMALL HOUSING
2-FOOT LONG EXTRUDED HOUSING WITH WHITE REFLECTOR AND FROSTED LENS
Light Source: (56) 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

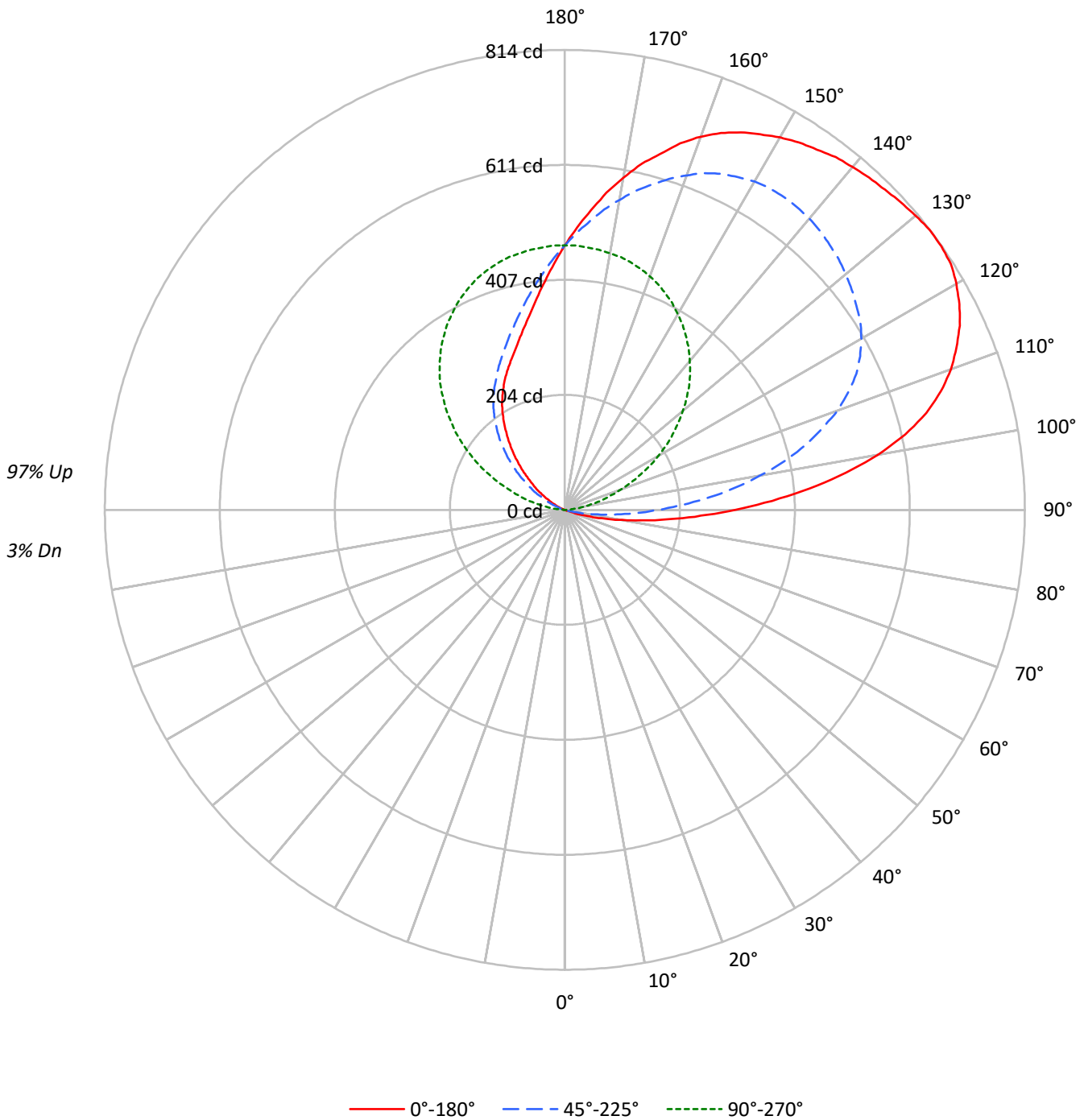
Lumens per Lamp: N/A
Luminaire Lumens: 1989.9 lumens
Efficiency: N/A
Efficacy: 97.1 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular w/ Sides (W: 2.18' x L: 0.29' x H: 0.11')
CIE Type: Indirect

Input Watts (W): 20.5
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: 24 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	0
RCR																		
0	96	96	96	96	82	82	82	82	57	57	57	34	34	34	13	13	13	3
1	86	82	78	74	74	70	67	64	48	46	45	28	27	26	10	9	9	1
2	78	71	65	60	67	61	56	52	42	39	36	25	23	21	8	8	7	0
3	71	62	55	50	61	54	48	43	37	33	30	22	20	18	7	7	6	0
4	65	55	47	42	55	47	41	36	33	29	26	19	17	15	7	6	5	0
5	59	49	41	35	51	42	36	31	29	25	22	17	15	13	6	5	4	0
6	55	43	36	30	46	37	31	26	26	22	19	15	13	11	5	4	4	0
7	50	39	31	26	43	33	27	23	23	19	16	14	11	10	5	4	3	0
8	46	35	28	23	40	30	24	20	21	17	14	12	10	8	4	3	3	0
9	43	32	25	20	37	27	21	17	19	15	12	11	9	7	4	3	2	0
10	40	29	22	17	34	25	19	15	17	13	11	10	8	7	4	3	2	0

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	0	0	0	0	0
5°	0	0	0	0	0
10°	0	0	0	0	0
15°	0	0	0	0	0
20°	0	0	0	0	0
25°	0	0	0	0	0
30°	0	0	0	0	0
35°	0	0	0	0	0
40°	0	0	0	0	0
45°	0	0	0	0	0
50°	0	0	0	0	0
55°	0	0	0	0	0
60°	0	0	0	0	0
65°	0	0	0	0	0
70°	246	0	0	0	0
75°	1262	187	0	0	0
80°	3258	1415	0	0	0
85°	6924	4091	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 90°
 Luminance: 13574 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.0	0.0
10°-20°	0.0	0.0
20°-30°	0.0	0.0
30°-40°	0.0	0.0
40°-50°	0.0	0.0
50°-60°	0.0	0.0
60°-70°	0.2	0.0
70°-80°	9.9	0.5
80°-90°	51.6	2.6
90°-100°	133.5	6.7
100°-110°	222.5	11.2
110°-120°	283.3	14.2
120°-130°	312.7	15.7
130°-140°	309.0	15.5
140°-150°	275.8	13.9
150°-160°	214.0	10.8
160°-170°	132.8	6.7
170°-180°	44.7	2.2
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	61.7	3.1
90°-120°	639.3	32.1
90°-150°	1536.7	77.2
90°-180°	1928.0	96.9
0°-180°	1989.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	0	0	0	0	0	
5°	0	0	0	0	0	0
15°	0	0	0	0	0	0
25°	0	0	0	0	0	0
35°	0	0	0	0	0	0
45°	0	0	0	0	0	0
55°	0	0	0	0	0	0
65°	0	0	0	0	0	1
75°	46	6	0	0	0	53
85°	188	93	0	0	0	137
90°	301	166	0	0	0	166
95°	435	258	12	1	1	382
105°	662	440	70	3	4	693
115°	771	569	148	32	12	762
125°	813	630	233	86	54	727
135°	801	663	311	153	115	621
145°	778	676	374	220	187	489
155°	737	656	422	278	252	341
165°	652	596	453	341	312	186
175°	532	513	466	423	406	53
180°	468	468	468	468	468	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	10.0	11.0	8.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	25.0	25.0	21.0	14.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	46.0	46.0	41.0	32.0	19.0	6.0	0.0	0.0	0.0	0.0	0.0
77.5°	72.0	71.0	65.0	54.0	38.0	20.0	3.0	0.0	0.0	0.0	0.0
80°	104.0	103.0	96.0	82.0	63.0	39.0	15.0	0.0	0.0	0.0	0.0
82.5°	142.0	141.0	132.0	116.0	93.0	64.0	32.0	7.0	0.0	0.0	0.0
85°	188.0	187.0	176.0	157.0	130.0	93.0	53.0	21.0	2.0	0.0	0.0
87.5°	241.0	237.0	227.0	204.0	169.0	127.0	79.0	38.0	9.0	0.0	0.0
90°	301.0	297.0	285.0	258.0	216.0	166.0	110.0	59.0	21.0	2.0	0.0
92.5°	367.0	366.0	348.0	316.0	267.0	209.0	146.0	84.0	37.0	10.0	4.0
95°	435.0	434.0	414.0	377.0	322.0	258.0	183.0	112.0	57.0	22.0	12.0
97.5°	502.0	501.0	476.0	438.0	377.0	306.0	223.0	143.0	79.0	37.0	24.0
100°	563.0	561.0	535.0	495.0	431.0	352.0	263.0	174.0	102.0	53.0	37.0
102.5°	617.0	613.0	588.0	546.0	481.0	398.0	302.0	206.0	128.0	72.0	53.0
105°	662.0	657.0	634.0	591.0	524.0	440.0	341.0	239.0	154.0	92.0	70.0
107.5°	698.0	694.0	670.0	629.0	563.0	477.0	378.0	271.0	181.0	113.0	87.0
110°	727.0	724.0	702.0	661.0	596.0	513.0	412.0	303.0	209.0	136.0	107.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	750.1	748.1	727.0	686.0	625.0	543.0	442.0	333.0	236.0	159.0	127.0
115°	771.1	769.1	749.1	710.0	649.0	569.0	470.0	362.0	264.0	182.0	148.0
117.5°	787.1	785.1	765.1	727.0	668.0	589.0	493.0	389.0	293.0	206.0	170.0
120°	800.1	797.1	779.1	742.1	684.0	606.0	513.0	415.0	320.0	230.0	191.0
122.5°	810.1	807.1	790.1	752.1	696.0	620.0	532.0	440.0	346.0	253.0	213.0
125°	813.1	811.1	795.1	757.1	702.0	630.0	549.0	462.0	369.0	276.0	233.0
127.5°	814.1	812.1	796.1	759.1	707.0	640.0	564.0	482.0	391.0	297.0	253.0
130°	810.1	810.1	794.1	759.1	710.0	649.0	578.0	501.0	410.0	317.0	273.0
132.5°	806.1	805.1	791.1	758.1	713.0	657.0	591.0	517.0	428.0	336.0	292.0
135°	801.1	801.1	788.1	758.1	716.0	663.0	602.0	531.0	443.0	353.0	311.0
137.5°	797.1	797.1	785.1	757.1	718.0	669.0	612.0	542.0	458.0	370.0	328.0
140°	792.1	792.1	780.1	755.1	719.0	673.0	618.0	551.0	468.0	385.0	344.0
142.5°	787.1	787.1	775.1	752.1	719.0	675.0	624.0	558.0	479.0	399.0	360.0
145°	778.1	779.1	769.1	747.1	716.0	676.0	626.0	562.0	487.0	412.0	374.0
147.5°	771.1	771.1	762.1	741.1	712.0	675.0	626.0	564.0	494.0	423.0	388.0
150°	761.1	761.1	752.1	735.0	708.0	671.0	625.0	565.0	499.0	433.0	400.0
152.5°	749.1	750.1	741.1	725.0	699.0	664.0	619.0	563.0	502.0	442.0	412.0
155°	737.1	738.1	730.0	714.0	689.0	656.0	613.0	561.0	505.0	450.0	422.0
157.5°	722.0	723.0	715.0	699.0	676.0	645.0	603.0	557.0	507.0	456.0	432.0
160°	703.0	704.0	695.0	681.0	659.0	630.0	593.0	551.0	506.0	462.0	440.0
162.5°	680.0	680.0	673.0	660.0	639.0	614.0	581.0	544.0	505.0	466.0	447.0
165°	652.0	654.0	648.0	636.0	618.0	596.0	567.0	535.0	502.0	469.0	453.0
167.5°	627.0	626.0	621.0	612.0	596.0	578.0	553.0	526.0	499.0	472.0	458.0
170°	597.0	596.0	592.0	584.0	572.0	557.0	537.0	516.0	495.0	472.0	461.0
172.5°	566.0	564.0	561.0	556.0	547.0	536.0	521.0	505.0	489.0	472.0	464.0
175°	532.0	532.0	530.0	526.0	520.0	513.0	503.0	492.0	482.0	471.0	466.0
177.5°	500.0	500.0	499.0	497.0	494.0	491.0	486.0	481.0	476.0	470.0	468.0
180°	468.0	468.0	468.0	468.0	468.0	468.0	468.0	468.0	468.0	468.0	468.0



TEST NUMBER: P189133

CATALOG NUMBER: A02-SI-A-1-LED-35K-D-120-S

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0
7.5°	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0
12.5°	0.0	0.0	0.0	0.0
15°	0.0	0.0	0.0	0.0
17.5°	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0
22.5°	0.0	0.0	0.0	0.0
25°	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0
35°	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	1.0	1.0
95°	0.0	1.0	1.0	1.0
97.5°	1.0	1.0	2.0	2.0
100°	3.0	2.0	2.0	2.0
102.5°	10.0	3.0	3.0	3.0
105°	18.0	3.0	4.0	4.0
107.5°	29.0	6.0	4.0	4.0
110°	41.0	12.0	5.0	5.0



TEST NUMBER: P189133

CATALOG NUMBER: A02-SI-A-1-LED-35K-D-120-S

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
112.5°	54.0	21.0	9.0	7.0
115°	68.0	32.0	16.0	12.0
117.5°	83.0	43.0	26.0	20.0
120°	99.0	56.0	36.0	30.0
122.5°	116.0	71.0	49.0	41.0
125°	132.0	86.0	62.0	54.0
127.5°	149.0	102.0	76.0	68.0
130°	166.0	119.0	91.0	82.0
132.5°	183.0	136.0	108.0	98.0
135°	200.0	153.0	125.0	115.0
137.5°	216.0	171.0	143.0	133.0
140°	232.0	187.0	161.0	151.0
142.5°	249.0	204.0	179.0	169.0
145°	264.0	220.0	196.0	187.0
147.5°	280.0	235.0	214.0	205.0
150°	295.0	249.0	230.0	222.0
152.5°	310.0	263.0	244.0	237.0
155°	326.0	278.0	258.0	252.0
157.5°	341.0	292.0	272.0	266.0
160°	356.0	307.0	287.0	280.0
162.5°	371.0	324.0	302.0	295.0
165°	387.0	341.0	319.0	312.0
167.5°	401.0	360.0	338.0	331.0
170°	415.0	380.0	360.0	353.0
172.5°	428.0	401.0	385.0	378.0
175°	441.0	423.0	411.0	406.0
177.5°	455.0	446.0	438.0	436.0
180°	468.0	468.0	468.0	468.0

(END OF REPORT)