Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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: McGRAW-EDISON

Report Number: P821497

Luminaire Tested: **TT-D2-735-12VDC-WQ-HSS**

Issue Date: 12/2/2020

Report Generated By 670245763

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Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P821497
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2010-017-2)
Test Lab:	INNOVATION CENTER
Issue Date:	12/2/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	TT-D2-735-12VDC-WQ-HSS
Description:	TOPTIER LED PARKING GARAGE LUMINAIRE
	3500K, 70 CRI LEDS AND WIDE DISTRIBUTION WITH HOUSE SIDE SHIELD
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	4015 lumens
Efficiency:	N/A
Efficacy:	105.7 lumens/watt
Luminous Opening:	Circular (Dia: 1.12' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B1 - U2 - G2

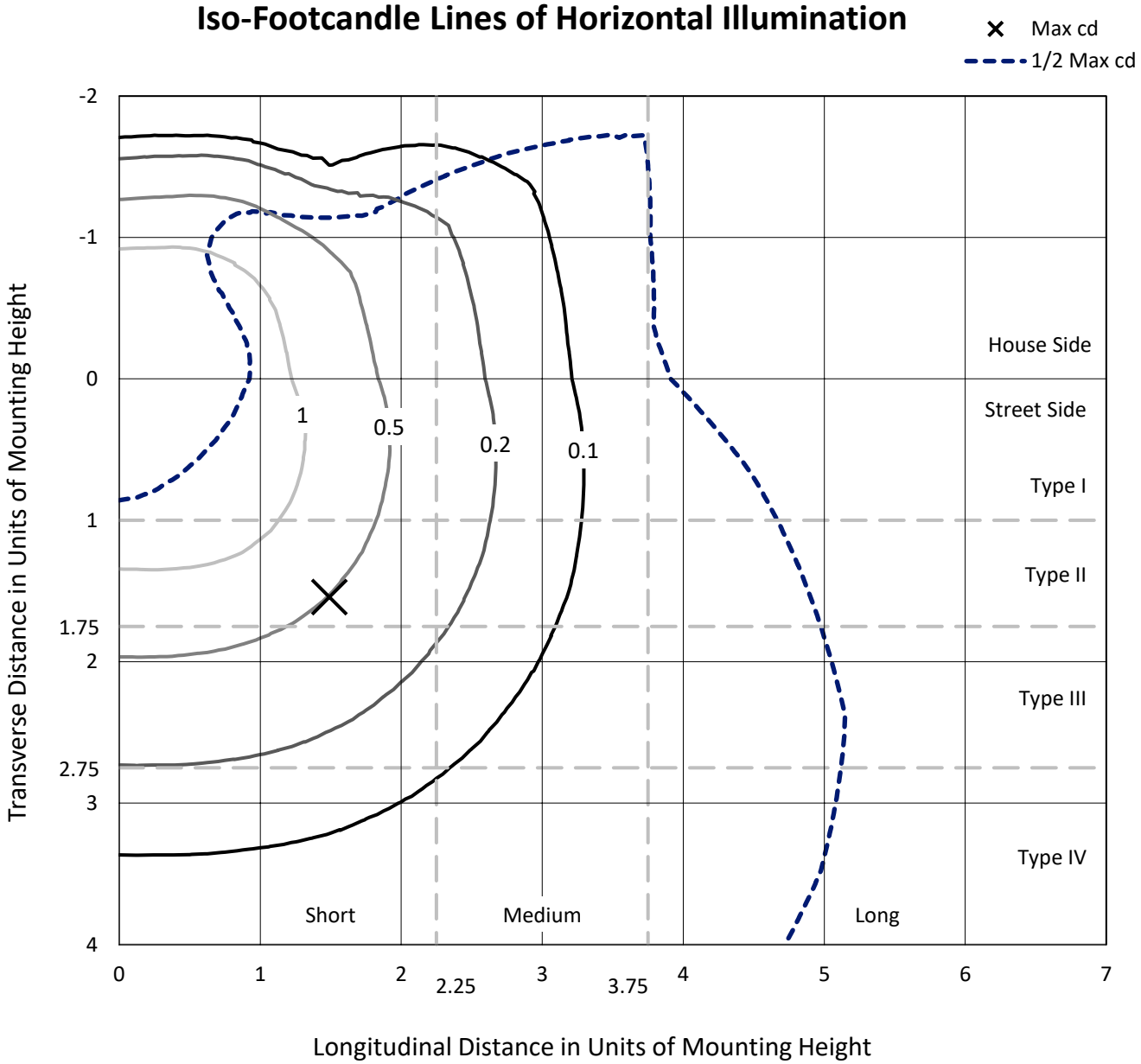
Input Watts (W):	38
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	25 FT

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Iso-Footcandle Lines of Horizontal Illumination



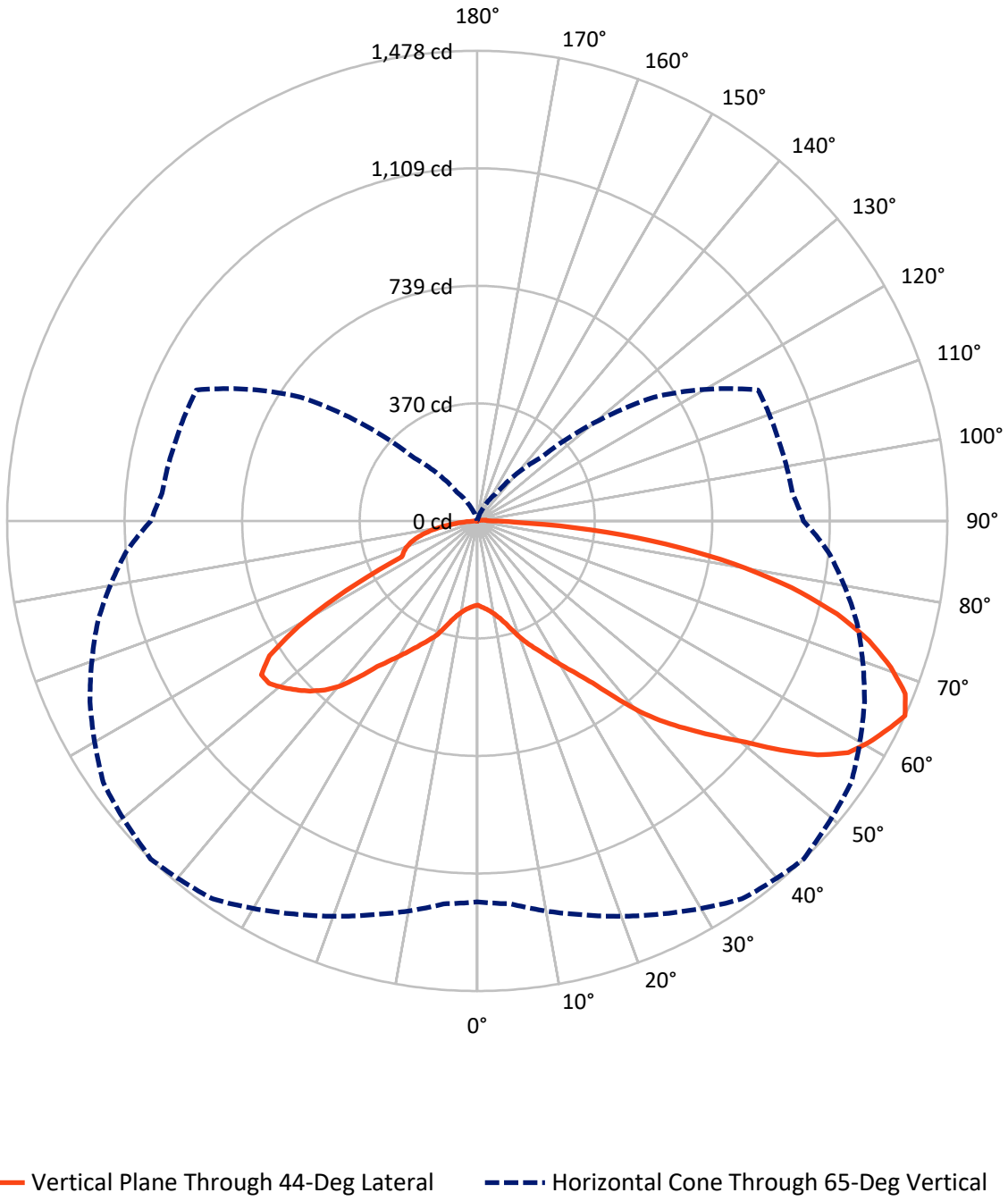
Based on 15 foot mounting height. Maximum calculated value = 1.6 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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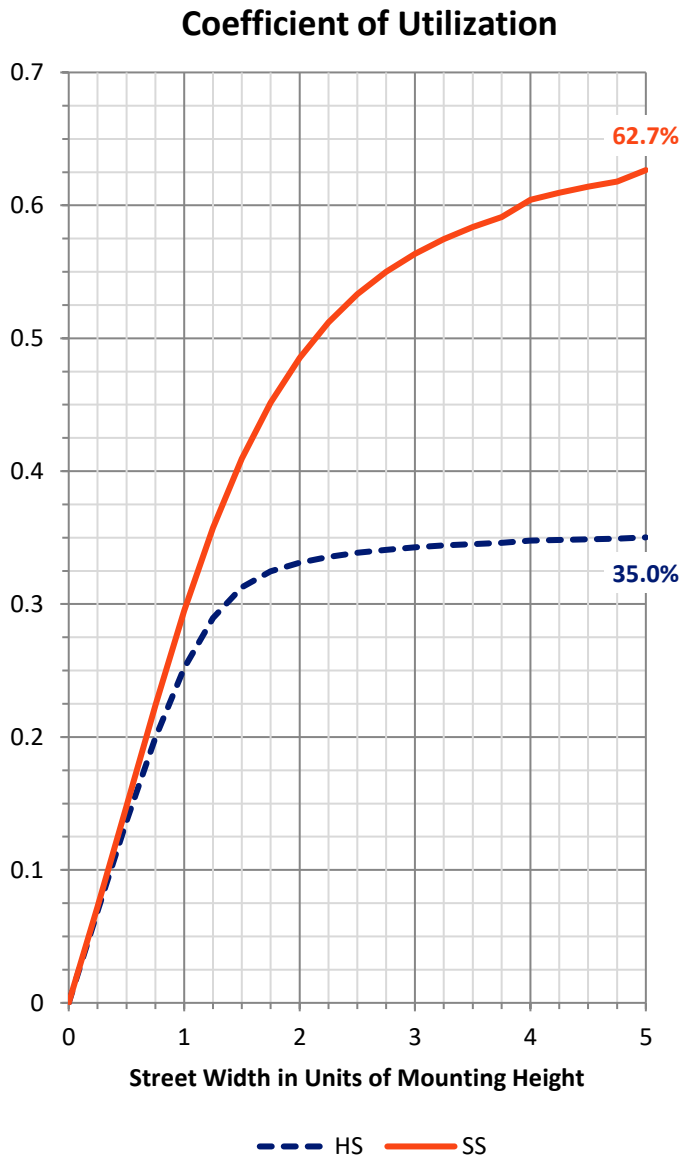
REPORT NUMBER: P821497
CATALOG NUMBER: TT-D2-735-12VDC-WQ-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1414.2	1.0	1415.1
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	2583.6	16.3	2599.9
	% Fixture	64.3	0.4	64.8
Total	Lumens	3997.8	17.2	4015.0
	% Fixture	99.6	0.4	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.9	0.7
10°-20°	95.4	2.4
20°-30°	204.4	5.1
30°-40°	370.1	9.2
40°-50°	617.6	15.4
50°-60°	855.4	21.3
60°-70°	886.5	22.1
70°-80°	713.4	17.8
80°-90°	228.2	5.7
90°-100°	11.6	0.3
100°-110°	3.7	0.1
110°-120°	0.7	0.0
120°-130°	0.5	0.0
130°-140°	0.3	0.0
140°-150°	0.2	0.0
150°-160°	0.1	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	3997.8	99.6
0°-180°	4015.0	100.0



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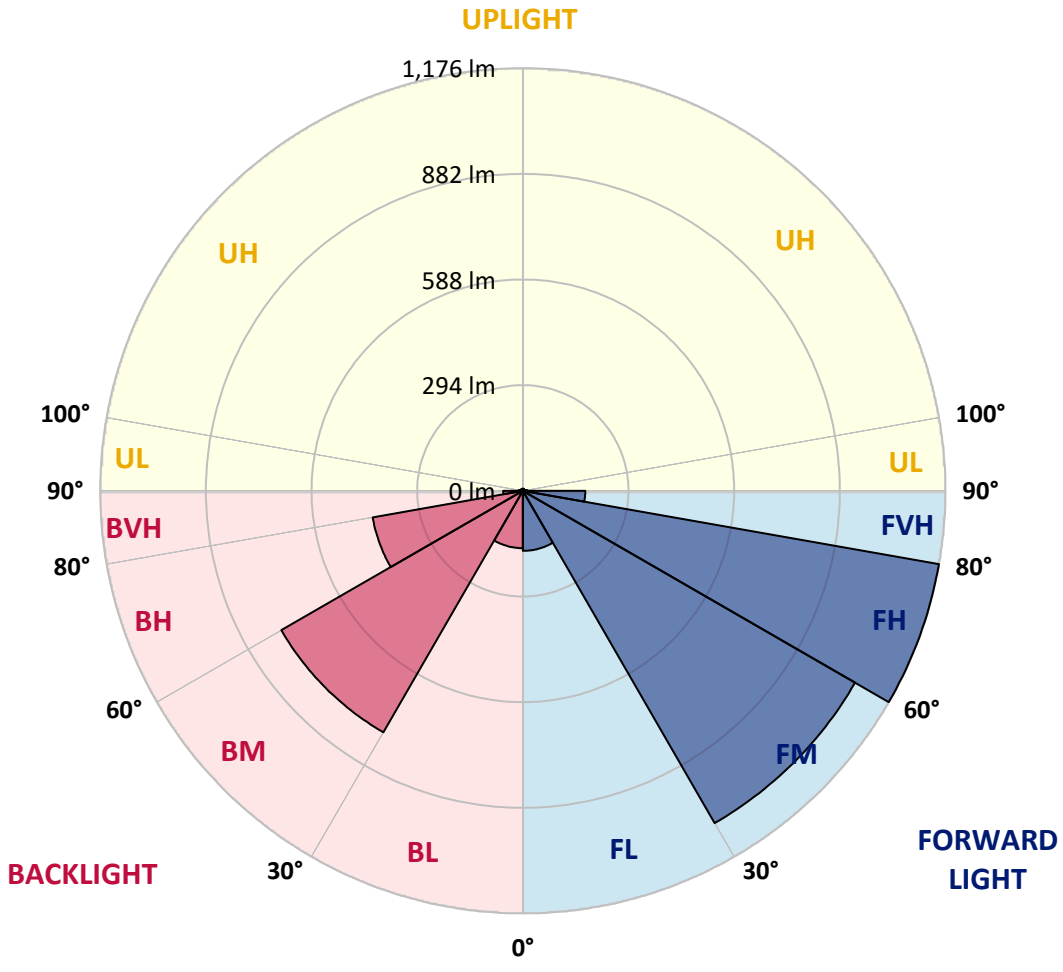
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	167.0	4.2			
FM	(30°-60°)	1067.4	26.6			
FH	(60°-80°)	1175.7	29.3			G1/1800
FVH	(80°-90°)	173.6	4.3			G2/225
BL	(0°-30°)	159.6	4.0	B1/500		
BM	(30°-60°)	775.7	19.3	B1/1000		
BH	(60°-80°)	424.3	10.6	B1/500		G1/500
BVH	(80°-90°)	54.6	1.4			G1/100
UL	(90°-100°)	11.6	0.3		U2/50	
UH	(100°-180°)	5.7	0.1		U1/10	

BUG Rating: B1-U2-G2
Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	264.9	264.9	264.9	264.9	264.9	264.9	264.9	264.9	264.9	264.9	264.9
2.5°	272.8	272.0	272.0	271.2	271.2	271.2	271.2	271.2	270.4	269.6	268.9
5°	279.8	279.8	279.0	279.0	278.3	277.5	278.3	277.5	276.7	275.9	275.1
7.5°	289.2	288.5	288.5	286.9	286.9	286.1	286.1	286.1	285.3	283.7	283.0
10°	302.6	301.0	301.0	299.4	298.6	297.9	297.9	296.3	296.3	295.5	294.7
12.5°	317.5	315.9	317.5	316.7	315.1	313.5	313.5	312.0	311.2	310.4	307.3
15°	337.0	334.7	336.3	336.3	335.5	334.7	334.7	331.6	330.0	328.4	325.3
17.5°	360.6	359.0	359.8	360.6	362.9	362.9	363.7	359.8	356.6	351.2	348.8
20°	390.3	389.6	391.9	391.9	394.3	394.3	395.1	391.1	385.6	381.7	377.0
22.5°	419.4	419.4	422.5	422.5	424.8	423.3	423.3	421.7	415.4	410.7	406.0
25°	449.1	448.4	451.5	453.8	457.0	453.1	454.6	452.3	446.0	439.7	433.5
27.5°	482.1	480.5	482.1	485.2	490.7	487.5	489.1	485.2	478.9	470.3	464.8
30°	518.1	515.8	518.1	522.8	526.7	528.3	527.5	522.0	516.5	504.0	500.1
32.5°	553.4	553.4	558.9	567.5	572.2	571.4	572.2	567.5	559.7	544.0	534.6
35°	596.5	599.6	606.7	619.2	629.4	625.5	625.5	623.9	610.6	591.8	579.3
37.5°	653.7	656.9	671.0	685.9	704.7	703.1	703.9	699.2	673.3	653.7	635.7
40°	720.3	723.5	744.6	765.8	783.8	789.3	790.1	779.9	751.7	723.5	695.3
42.5°	781.5	785.4	807.3	837.1	856.7	865.4	866.9	850.5	820.7	788.5	753.3
45°	842.6	847.3	872.4	903.8	932.0	935.9	936.7	922.6	889.7	852.8	807.3
47.5°	905.3	909.2	935.1	972.7	1003.3	1011.1	1011.9	998.6	958.6	913.9	860.6
50°	962.5	970.4	1005.7	1045.6	1086.4	1092.7	1093.4	1078.6	1031.5	981.4	910.8
52.5°	1030.0	1033.9	1071.5	1138.1	1172.6	1196.9	1197.7	1168.7	1118.5	1051.1	960.2
55°	1108.3	1115.4	1153.8	1220.4	1282.4	1298.8	1303.5	1269.0	1202.4	1129.5	1022.9
57.5°	1153.8	1167.1	1223.6	1287.1	1364.7	1375.6	1378.0	1341.9	1268.2	1188.3	1069.9
60°	1178.1	1185.9	1245.5	1344.3	1404.6	1414.8	1414.0	1386.6	1312.9	1215.7	1091.9
62.5°	1205.5	1218.9	1269.0	1369.4	1421.9	1447.0	1443.0	1414.8	1339.6	1233.0	1113.0
65°	1197.7	1208.7	1282.4	1363.9	1450.9	1478.3	1472.8	1435.2	1343.5	1236.1	1107.6
67.5°	1166.3	1175.0	1247.9	1349.0	1432.1	1451.7	1461.1	1424.2	1321.5	1202.4	1073.1
70°	1102.1	1115.4	1185.9	1289.4	1365.4	1379.5	1381.1	1358.4	1265.9	1140.5	1015.8
72.5°	1013.5	1024.5	1101.3	1206.3	1272.2	1288.6	1290.2	1255.7	1185.9	1055.8	933.5
75°	907.7	917.9	977.4	1087.2	1152.2	1168.7	1167.1	1135.0	1061.3	938.2	824.6
77.5°	776.8	795.6	848.1	938.2	1001.7	1010.4	1011.9	976.7	917.1	810.5	700.0
80°	613.0	631.0	690.6	758.0	811.3	818.3	820.7	790.9	736.8	642.7	548.7
82.5°	435.8	451.5	498.5	553.4	598.1	598.1	599.6	575.3	533.8	453.1	379.4
85°	248.5	260.2	291.6	330.8	362.9	359.0	359.8	337.8	310.4	247.7	200.7
87.5°	81.5	87.0	94.1	109.0	123.8	114.4	119.1	98.8	89.4	66.6	51.7
90°	43.1	43.1	41.5	40.0	36.8	32.1	32.1	25.9	19.6	12.5	4.7
92.5°	39.2	39.2	37.6	36.1	32.9	29.0	29.0	23.5	17.2	11.0	3.9
95°	32.1	32.1	31.4	29.8	27.4	24.3	23.5	19.6	14.9	8.6	3.1
97.5°	25.1	25.1	24.3	23.5	21.2	18.8	18.8	14.9	11.0	7.1	2.4
100°	18.8	18.8	18.8	17.2	16.5	14.1	14.1	11.8	8.6	5.5	1.6
102.5°	13.3	14.1	13.3	12.5	11.8	10.2	10.2	8.6	6.3	3.9	1.6
105°	9.4	9.4	8.6	8.6	7.8	7.1	7.1	5.5	3.9	2.4	0.8
107.5°	5.5	5.5	5.5	5.5	4.7	4.7	4.7	3.9	2.4	1.6	0.8
110°	3.1	3.1	3.1	3.1	2.4	2.4	2.4	1.6	1.6	0.8	0.8

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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
112.5°	1.6	1.6	1.6	1.6	1.6	*1.6*	1.6	0.8	0.8	0.8	0.8
115°	0.8	0.8	0.8	1.6	0.8	*0.8*	0.8	0.8	0.8	0.8	0.8
117.5°	0.8	0.8	0.8	0.8	0.8	*0.8*	0.8	0.8	0.8	0.8	0.8
120°	0.0	0.0	0.8	0.8	0.8	*0.8*	0.8	0.8	0.8	0.8	0.8
122.5°	0.0	0.0	0.8	0.8	0.8	*0.8*	0.8	0.8	0.8	0.8	0.8
125°	0.0	0.0	0.8	0.8	0.8	*0.8*	0.8	0.8	0.8	0.8	0.8
127.5°	0.0	0.0	0.0	0.8	0.8	*0.8*	0.8	0.8	0.8	0.8	0.8
130°	0.0	0.0	0.0	0.8	0.8	*0.8*	0.8	0.8	0.8	0.8	0.8
132.5°	0.0	0.0	0.0	0.8	0.8	*0.8*	0.8	0.8	0.8	0.8	0.8
135°	0.0	0.0	0.0	0.0	0.8	*0.8*	0.8	0.8	0.8	0.8	0.8
137.5°	0.0	0.0	0.0	0.0	0.0	*0.0*	0.8	0.8	0.8	0.8	0.8
140°	0.8	0.8	0.0	0.0	0.0	*0.0*	0.8	0.8	0.8	0.8	0.8
142.5°	0.8	0.8	0.8	0.0	0.0	*0.8*	0.8	0.8	0.8	0.8	0.8
145°	0.8	0.8	0.0	0.0	0.0	*0.0*	0.0	0.8	0.8	0.8	0.8
147.5°	0.8	0.8	0.8	0.0	0.0	*0.8*	0.8	0.8	0.8	0.8	0.8
150°	0.8	0.8	0.0	0.0	0.0	*0.0*	0.8	0.8	0.8	0.8	0.8
152.5°	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.8	0.8	0.8	0.8
155°	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.8	0.8	0.8
157.5°	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.8	0.8	0.8	0.8
160°	0.8	0.0	0.0	0.0	0.0	*0.0*	0.0	0.8	0.8	0.8	0.8
162.5°	0.8	0.8	0.0	0.0	0.0	*0.0*	0.0	0.8	0.8	0.8	0.8
165°	0.8	0.0	0.0	0.0	0.0	*0.0*	0.8	0.8	0.8	0.8	0.8
167.5°	0.8	0.8	0.0	0.0	0.0	*0.0*	0.8	0.8	0.8	0.8	0.8
170°	0.8	0.0	0.0	0.0	0.0	*0.8*	0.0	0.8	0.8	0.8	0.8
172.5°	0.8	0.8	0.0	0.0	0.0	*0.0*	0.8	0.8	0.8	0.8	0.8
175°	0.8	0.8	0.8	0.0	0.0	*0.0*	0.8	0.8	0.8	0.8	0.8
177.5°	0.0	0.8	0.0	0.0	0.0	*0.0*	0.0	0.8	0.8	0.8	0.8
180°	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	264.9	264.9	264.9	264.9	264.9	264.9	264.9	264.9	264.9	264.9	264.9
2.5°	268.9	268.9	268.1	267.3	267.3	267.3	266.5	266.5	266.5	265.7	265.7
5°	275.1	274.3	274.3	273.6	273.6	272.8	272.8	272.0	271.2	271.2	270.4
7.5°	283.7	283.0	281.4	282.2	280.6	279.8	279.0	279.0	279.0	278.3	278.3
10°	293.9	293.9	292.4	292.4	290.8	290.0	289.2	289.2	290.0	290.0	289.2
12.5°	307.3	306.5	306.5	305.7	304.9	304.1	304.9	304.9	304.1	303.3	302.6
15°	323.7	323.7	323.7	324.5	323.7	323.7	323.7	322.9	321.4	319.8	319.8
17.5°	348.8	348.0	346.5	347.2	348.8	351.2	348.8	346.5	344.1	344.1	343.3
20°	374.7	375.5	375.5	376.2	378.6	380.9	377.8	376.2	374.7	373.1	371.5
22.5°	402.9	403.7	403.7	402.9	404.5	403.7	402.1	400.5	399.0	396.6	395.1
25°	430.3	431.1	430.3	429.5	430.3	428.0	425.6	423.3	419.4	415.4	415.4
27.5°	460.9	460.1	457.0	457.8	456.2	454.6	449.9	444.4	438.9	435.0	435.0
30°	493.0	493.0	486.8	489.9	486.8	486.0	475.8	468.7	460.9	455.4	454.6
32.5°	528.3	526.7	522.0	525.2	522.0	518.9	506.4	497.0	483.6	475.8	475.0
35°	570.6	566.7	562.8	565.9	565.9	557.3	544.8	527.5	508.7	499.3	498.5
37.5°	622.4	620.0	615.3	619.2	622.4	613.7	594.9	569.8	543.2	529.1	528.3
40°	679.6	676.4	674.1	679.6	681.9	673.3	648.2	613.0	576.9	556.5	553.4
42.5°	733.7	726.6	722.7	730.5	728.2	718.8	684.3	643.5	594.1	570.6	566.7
45°	782.3	774.4	768.9	776.0	772.9	754.0	715.6	660.8	601.2	572.2	567.5
47.5°	830.1	818.3	809.7	819.1	812.8	783.8	736.8	669.4	593.4	558.9	551.0
50°	870.8	856.7	851.2	862.2	852.8	812.1	751.7	665.5	573.8	523.6	511.1
52.5°	919.4	898.3	892.8	913.9	892.8	838.7	754.8	656.1	529.1	468.7	457.0
55°	968.8	945.3	936.7	956.3	924.1	844.2	739.2	602.0	461.7	397.4	380.2
57.5°	994.7	972.7	964.9	979.0	919.4	790.9	669.4	501.7	360.6	288.5	269.6
60°	1018.2	979.8	969.6	988.4	870.8	667.0	518.1	359.8	217.9	163.8	149.7
62.5°	1034.7	997.8	976.7	985.3	781.5	485.2	297.9	173.2	82.3	57.2	56.4
65°	*1026.0*	*994.7*	*980.6*	*974.3*	*678.8*	*279.0*	*109.7*	*43.9*	*2.4*	*2.4*	*1.6*
67.5°	999.4	964.9	961.0	966.5	671.7	268.1	101.9	40.0	0.0	0.0	0.0
70°	940.6	916.3	916.3	935.1	641.2	254.0	94.8	36.8	0.0	0.0	0.0
72.5°	861.4	842.6	853.6	881.8	595.7	234.4	85.4	32.9	0.0	0.0	0.0
75°	766.6	747.0	761.1	792.5	539.3	209.3	74.5	28.2	0.0	0.0	0.0
77.5°	645.9	632.6	654.5	683.5	464.0	176.4	61.1	22.7	0.0	0.0	0.0
80°	503.2	496.2	525.2	551.0	374.7	138.7	46.2	16.5	0.0	0.0	0.0
82.5°	347.2	344.1	372.3	399.0	268.1	97.2	31.4	11.0	0.0	0.0	0.0
85°	181.8	181.8	203.8	228.1	149.7	52.5	15.7	4.7	0.0	0.0	0.0
87.5°	40.0	38.4	41.5	53.3	29.8	10.2	2.4	0.8	0.0	0.0	0.0
90°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0
105°	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P821497
CATALOG NUMBER: TT-D2-735-12VDC-WQ-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0
117.5°	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0
122.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0
125°	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)