

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: INVUE

Report Number: P160164

Luminaire Tested: **ENV-F01-LED-E1-GZW-7050-ULG**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P160164
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P20107) AND SCALED
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENV-F01-LED-E1-GZW-7050-ULG
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(1) LIGHTBARS WITH AccuLED OPTICS - WALL GRAZER WIDE
Light Source: (7) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2674.5 lumens
Efficiency: N/A
Efficacy: 78.9 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type I - Short - Non-Cutoff
BUG Rating: B1 - U3 - G1

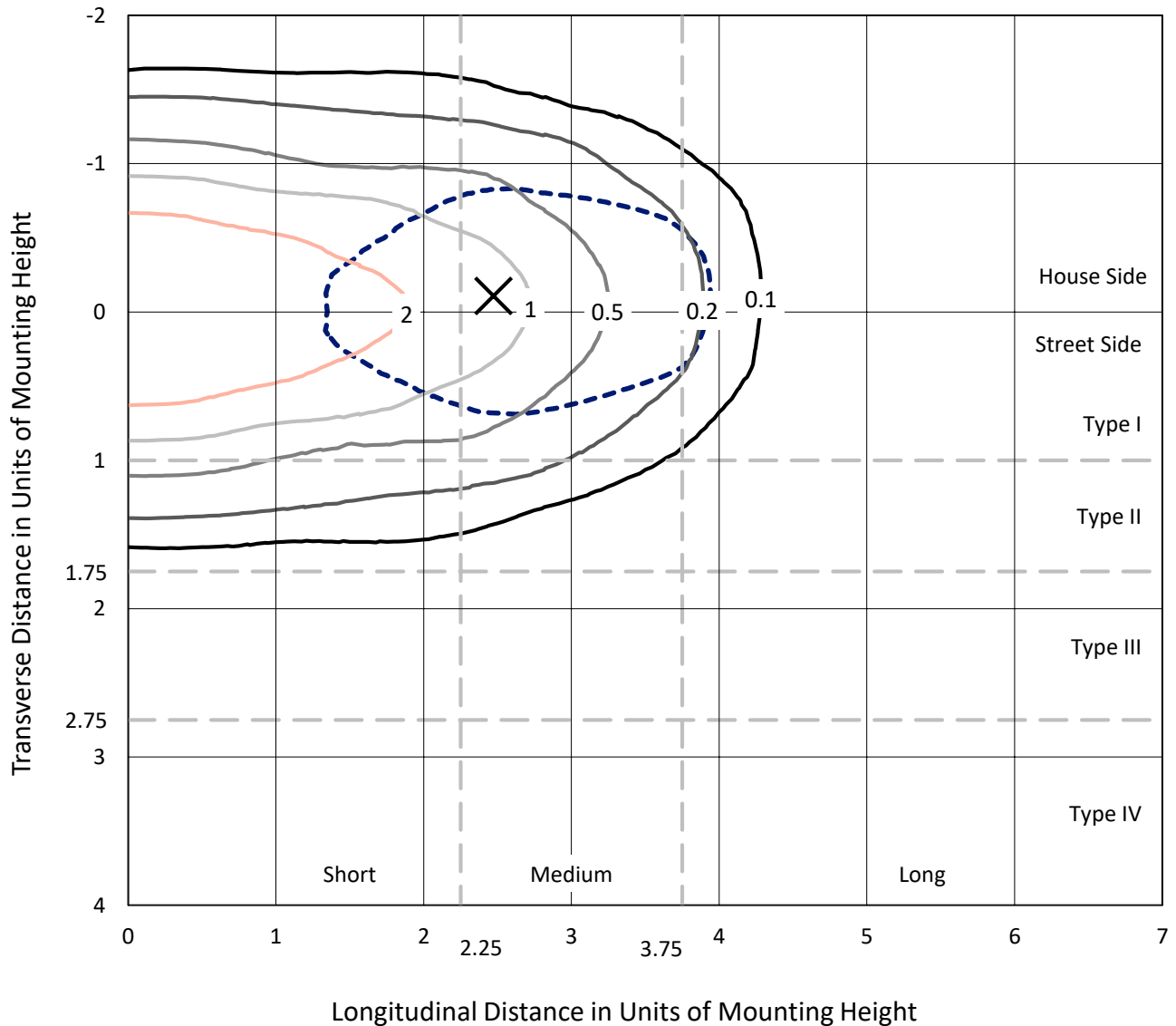
Input Watts (W): 33.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

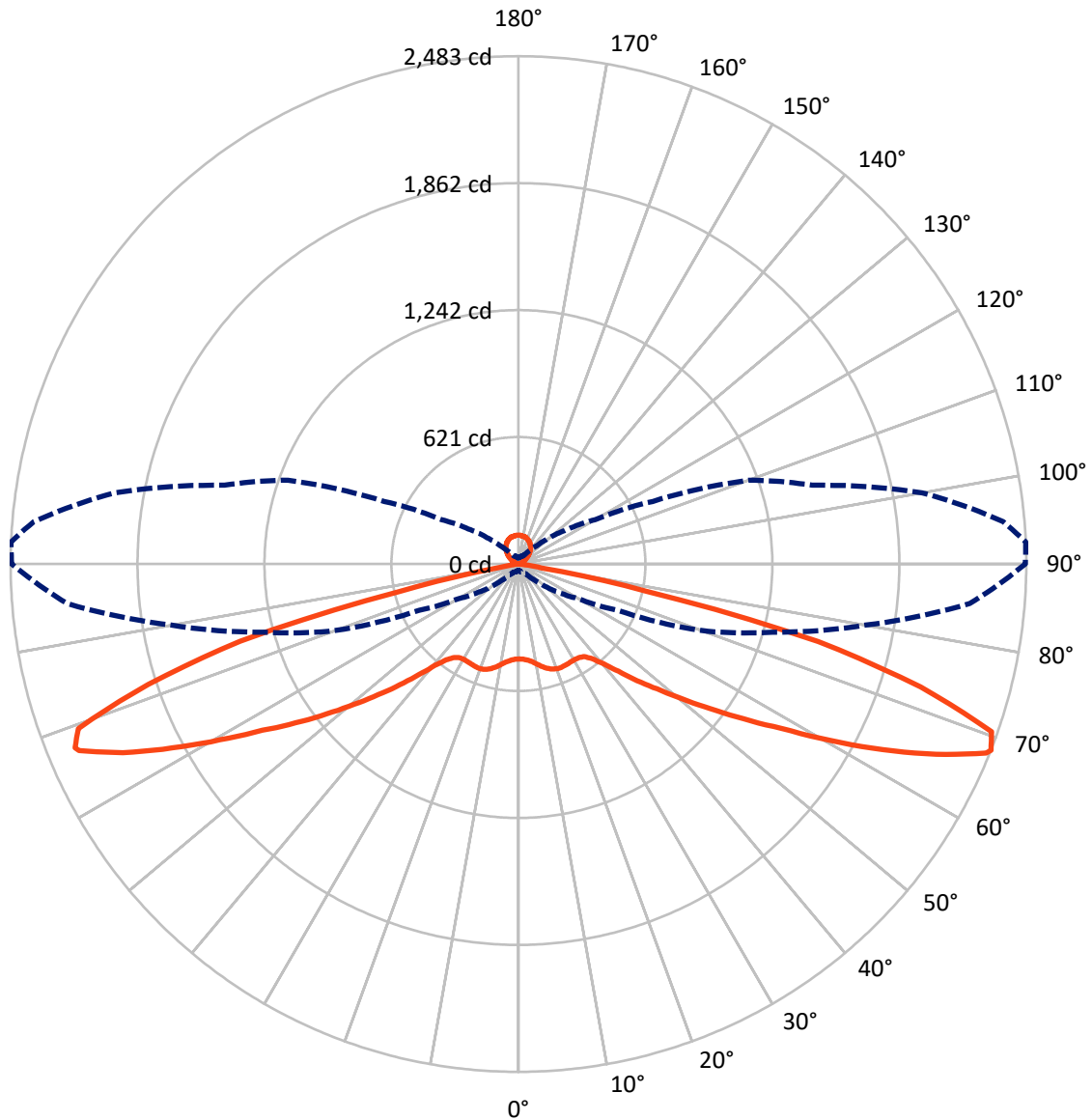
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.8 fc
 Type I - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 92.5-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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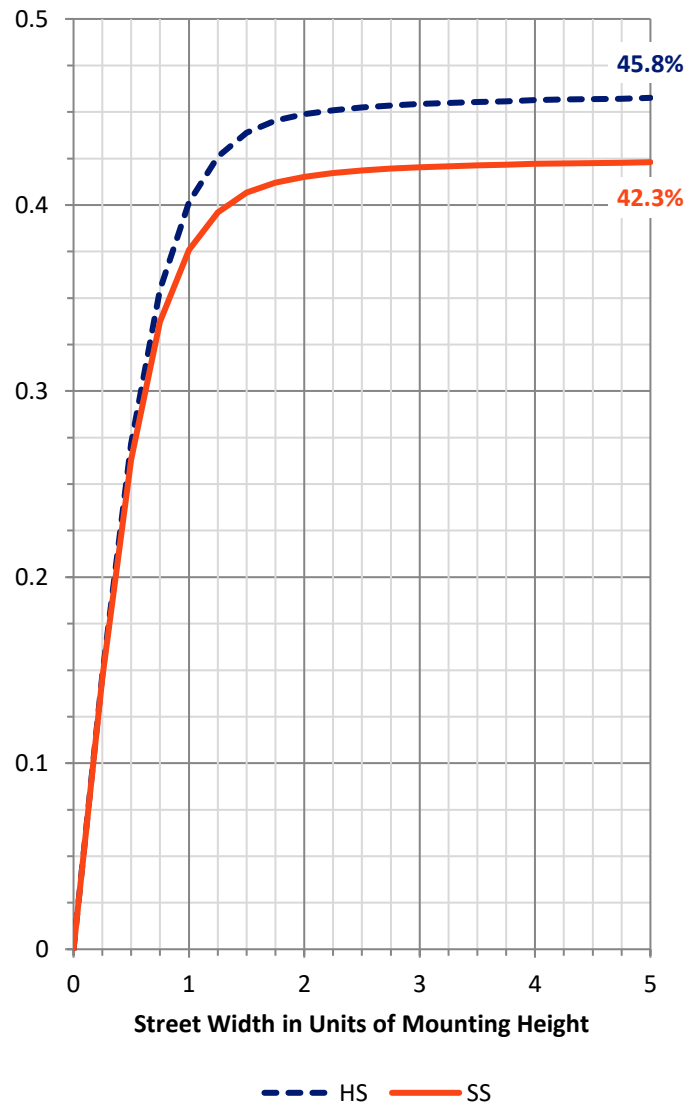
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1232.3	157.7	1390.1
	% Fixture	46.1	5.9	52.0
Street Side	Lumens	1126.6	157.7	1284.4
	% Fixture	42.1	5.9	48.0
Total	Lumens	2359.0	315.5	2674.5
	% Fixture	88.2	11.8	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.6	1.7
10°-20°	144.2	5.4
20°-30°	233.9	8.7
30°-40°	290.8	10.9
40°-50°	361.5	13.5
50°-60°	444.7	16.6
60°-70°	525.8	19.7
70°-80°	294.5	11.0
80°-90°	17.9	0.7
90°-100°	1.3	0.0
100°-110°	12.3	0.5
110°-120°	25.2	0.9
120°-130°	43.0	1.6
130°-140°	60.0	2.2
140°-150°	65.4	2.4
150°-160°	56.9	2.1
160°-170°	38.2	1.4
170°-180°	13.3	0.5
0°-90°	2359.0	88.2
0°-180°	2674.5	100.0



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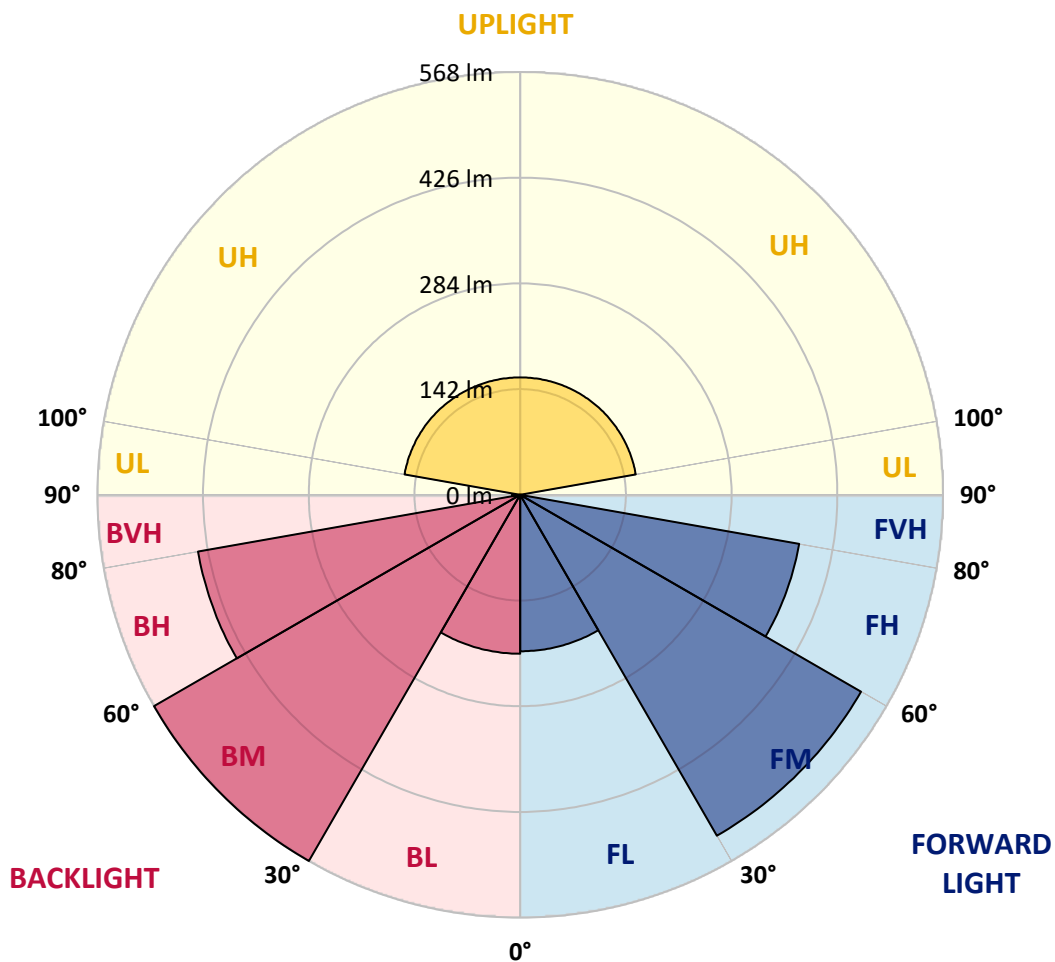
CATALOG NUMBER: ENV-F01-LED-E1-GZW-7050-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	210.2	7.9			
FM	(30°-60°)	528.9	19.8			
FH	(60°-80°)	380.7	14.2			G0/660
FVH	(80°-90°)	6.8	0.3			G0/10
BL	(0°-30°)	213.5	8.0	B1/500		
BM	(30°-60°)	568.2	21.2	B1/1000		
BH	(60°-80°)	439.6	16.4	B1/500		G1/500
BVH	(80°-90°)	11.1	0.4			G1/100
UL	(90°-100°)	1.3	0.0		U1/10	
UH	(100°-180°)	157.7	5.9		U3/500	

BUG Rating: B1-U3-G1

Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	463.8	463.8	463.8	463.8	463.8	463.8	463.8	463.8	463.8	463.8	463.8
2.5°	465.9	465.9	465.9	466.3	466.7	467.6	467.2	468.0	466.7	468.4	468.4
5°	471.4	471.8	472.2	472.2	473.1	473.5	473.1	474.4	473.1	474.8	475.2
7.5°	476.5	476.5	476.9	477.3	478.2	479.0	479.4	480.7	480.3	482.0	483.7
10°	480.3	479.9	480.3	481.1	483.3	484.5	486.2	487.9	488.8	490.5	493.0
12.5°	482.0	481.6	482.8	485.0	487.1	489.6	492.2	496.0	498.5	501.0	504.9
15°	481.1	481.1	482.8	485.4	489.6	494.3	498.9	504.0	508.7	514.2	518.0
17.5°	473.1	473.9	476.5	480.7	487.1	494.3	501.9	510.4	518.0	525.6	530.7
20°	458.7	459.5	464.2	469.3	477.8	488.3	500.2	512.5	524.3	534.5	541.7
22.5°	440.9	440.1	444.3	451.1	462.5	475.2	490.5	508.7	524.8	539.2	549.3
25°	413.4	413.4	418.0	426.5	438.8	454.5	473.1	496.4	518.0	536.6	551.0
27.5°	384.1	384.6	390.5	397.7	411.7	426.5	448.1	475.2	501.5	526.0	547.2
30°	354.9	356.2	361.3	368.5	383.3	399.0	421.0	447.7	476.1	506.6	535.4
32.5°	324.9	326.5	330.8	339.3	355.3	372.7	395.2	418.9	446.0	479.4	516.7
35°	296.5	297.7	301.1	311.3	327.8	346.5	371.4	394.3	421.8	452.8	493.8
37.5°	269.8	271.1	274.9	285.5	302.0	320.6	345.2	371.0	399.4	429.9	470.6
40°	241.0	244.0	249.0	259.2	274.5	295.6	320.6	347.7	377.8	412.5	454.0
42.5°	214.7	217.3	221.9	230.8	246.1	268.5	294.8	322.7	355.3	394.7	441.7
45°	190.6	192.7	197.4	205.4	221.5	239.3	263.0	292.2	326.1	371.4	428.6
47.5°	167.3	169.4	174.5	184.2	197.4	214.7	235.9	261.7	293.1	339.3	403.6
50°	144.0	146.1	151.2	160.9	173.7	190.6	210.1	233.4	264.3	304.1	367.2
52.5°	118.6	120.7	125.8	135.5	147.8	163.9	183.8	208.0	236.8	274.5	326.5
55°	91.1	94.0	98.7	106.7	119.9	136.0	155.9	182.1	211.3	248.2	296.5
57.5°	65.6	67.8	73.3	79.6	90.6	107.6	125.4	152.5	185.1	222.8	270.6
60°	47.9	50.0	53.8	58.9	66.5	78.8	94.4	119.9	155.9	198.2	247.3
62.5°	39.8	41.5	45.3	50.4	54.6	60.6	69.9	89.4	124.5	171.5	223.2
65°	35.2	36.4	39.8	44.9	48.3	50.8	54.6	67.8	96.6	142.7	199.5
67.5°	31.3	32.6	35.2	39.4	43.2	44.5	46.6	55.5	75.8	116.0	174.5
68°	30.9	32.2	34.3	38.1	41.9	43.2	45.3	54.2	73.7	110.5	167.7
70°	28.8	29.6	31.8	34.7	37.7	38.5	41.1	50.0	69.0	96.6	136.0
72.5°	26.3	26.7	28.0	30.5	33.5	33.9	36.4	43.6	54.2	71.2	101.2
75°	22.0	22.4	24.1	26.3	28.0	28.8	29.6	33.0	36.8	44.0	59.7
77.5°	16.9	17.8	19.1	20.3	22.9	23.7	22.9	25.4	27.1	30.1	36.4
80°	10.2	10.2	11.4	12.7	14.0	16.1	15.2	17.8	19.1	20.8	24.6
82.5°	1.7	2.1	2.1	3.0	3.8	4.7	5.1	6.4	8.0	9.7	13.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	1.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
92.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
97.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
100°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
102.5°	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
105°	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8
107.5°	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7



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CATALOG NUMBER: ENV-F01-LED-E1-GZW-7050-ULG

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8
112.5°	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2
115°	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
117.5°	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
120°	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8
122.5°	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9
125°	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8
127.5°	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
130°	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
132.5°	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5
135°	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9
137.5°	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
140°	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5
142.5°	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
145°	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9
147.5°	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1
150°	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1
152.5°	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7
155°	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7
157.5°	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0
160°	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3
162.5°	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5
165°	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0
167.5°	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1
170°	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4
172.5°	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6
175°	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5
177.5°	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1
180°	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	92.5°	95°	100°
0°	463.8	463.8	463.8	463.8	463.8	463.8	463.8	463.8	463.8	463.8	463.8
2.5°	465.9	467.2	467.2	466.7	466.7	466.7	465.5	465.9	466.3	467.6	465.9
5°	472.7	473.9	473.5	473.1	473.1	473.1	471.4	471.8	472.2	473.1	471.4
7.5°	481.6	482.8	483.3	483.3	483.3	484.1	481.6	481.6	482.4	483.3	480.7
10°	494.7	494.7	496.0	496.8	497.7	498.5	496.8	496.0	497.7	497.7	494.7
12.5°	507.0	507.8	509.9	511.6	512.1	513.8	513.8	513.3	514.6	514.2	510.8
15°	521.0	521.8	523.5	525.6	526.0	527.7	527.7	528.2	529.4	530.3	525.2
17.5°	534.1	535.4	535.4	535.8	536.6	537.9	538.7	539.2	540.4	541.3	536.2
20°	545.1	546.4	544.2	542.6	540.9	541.7	543.4	545.1	545.9	546.4	540.0
22.5°	553.6	554.0	550.6	545.9	541.3	540.9	543.0	545.9	546.8	546.4	537.5
25°	558.2	559.5	556.1	548.9	540.4	537.5	539.6	543.4	545.1	543.4	532.8
27.5°	558.2	562.9	561.2	553.6	542.1	534.1	535.4	541.3	542.6	540.4	528.2
30°	554.0	563.7	565.8	561.2	549.3	535.4	533.7	540.4	542.1	538.3	526.0
32.5°	545.5	563.3	571.8	572.2	562.9	545.5	537.0	543.8	545.1	540.4	530.3
35°	533.7	562.9	579.4	587.4	584.5	567.1	552.3	556.5	555.7	550.6	546.8
37.5°	520.5	562.9	590.4	609.0	615.8	606.9	587.4	585.3	587.4	579.8	577.7
40°	506.1	564.2	606.1	639.1	659.4	662.4	645.0	639.1	641.7	634.5	637.4
42.5°	497.7	565.8	626.8	674.3	713.7	743.7	736.1	718.3	717.0	717.9	724.2
45°	493.4	570.1	647.6	714.1	769.1	836.1	843.3	811.5	813.2	817.9	827.6
47.5°	488.8	578.1	671.7	755.6	829.7	923.7	958.9	916.1	912.7	930.1	933.1
50°	471.8	587.9	699.3	802.2	893.2	1022.4	1077.9	1034.3	1035.1	1051.2	1045.3
52.5°	432.9	588.3	728.5	848.8	956.8	1119.8	1204.1	1175.3	1173.2	1188.9	1157.5
55°	379.1	561.6	752.2	894.5	1016.9	1210.5	1334.6	1340.9	1336.7	1339.2	1271.5
57.5°	335.9	496.0	754.7	933.1	1067.7	1296.4	1468.4	1514.1	1514.6	1503.6	1383.3
60°	307.9	422.3	721.7	964.8	1127.0	1406.1	1642.9	1745.4	1751.3	1706.4	1532.8
62.5°	284.6	385.0	653.5	997.4	1195.2	1517.1	1831.0	1999.5	1999.9	1925.0	1697.5
65°	266.4	364.7	578.6	985.1	1247.7	1624.7	2030.0	2255.3	2244.3	2161.7	1853.8
67.5°	246.1	346.5	543.8	966.1	1292.6	1724.2	2205.4	2464.1	2467.1	2365.5	1998.7
68°	241.8	339.7	534.9	950.0	1287.6	1720.8	2214.7	2478.1	2483.2	2378.6	2005.0
70°	208.4	296.5	465.5	829.7	1196.1	1628.9	2155.4	2438.7	2454.4	2337.5	1934.3
72.5°	138.9	205.0	310.9	586.2	921.6	1294.3	1764.5	2042.7	2055.9	1977.1	1606.5
75°	88.1	124.5	165.2	338.0	619.2	928.8	1330.3	1492.5	1514.1	1488.3	1202.8
77.5°	53.4	87.2	101.6	163.9	326.1	434.5	601.0	611.6	636.2	620.9	623.4
80°	35.2	60.6	74.1	111.4	113.1	93.6	106.3	107.2	113.5	120.7	125.8
82.5°	19.9	36.8	51.7	76.2	67.3	34.7	29.6	30.9	31.8	32.6	38.5
85°	3.0	6.8	14.4	23.7	24.1	11.4	10.6	9.7	10.2	11.0	14.0
87.5°	0.0	0.0	0.0	0.0	0.4	0.8	1.3	1.3	1.3	2.5	2.5
90°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
92.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
97.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
100°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
102.5°	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
105°	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8
107.5°	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7



REPORT NUMBER: P160164

CATALOG NUMBER: ENV-F01-LED-E1-GZW-7050-ULG

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	92.5°	95°	100°
110°	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8
112.5°	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2
115°	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
117.5°	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
120°	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8
122.5°	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9
125°	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8
127.5°	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
130°	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
132.5°	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5
135°	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9
137.5°	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
140°	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5
142.5°	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
145°	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9
147.5°	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1
150°	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1
152.5°	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7
155°	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7
157.5°	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0
160°	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3
162.5°	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5
165°	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0
167.5°	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1
170°	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4
172.5°	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6
175°	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5
177.5°	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1
180°	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8



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CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	463.8	463.8	463.8	463.8	463.8	463.8	463.8	463.8	463.8	463.8	463.8
2.5°	465.5	465.0	465.5	464.2	465.5	465.0	465.0	465.0	464.6	465.0	465.0
5°	470.6	470.6	470.6	469.7	470.6	470.6	470.6	470.6	470.1	470.6	471.0
7.5°	480.3	480.3	479.9	478.6	479.4	479.4	479.0	478.2	477.3	477.8	477.3
10°	493.4	494.3	491.7	491.7	490.5	488.8	487.5	486.2	485.8	485.0	483.3
12.5°	509.5	509.1	505.7	504.4	503.6	500.2	497.7	496.4	494.7	492.6	490.0
15°	523.9	522.2	519.7	518.4	517.1	513.3	509.9	507.0	504.9	501.9	498.1
17.5°	533.7	532.0	530.7	530.3	530.3	526.9	523.9	520.1	515.4	509.9	503.6
20°	535.8	535.8	536.2	538.7	541.3	540.0	536.6	532.0	525.2	516.3	506.6
22.5°	532.8	534.5	538.3	544.7	550.2	550.6	547.2	540.4	529.0	516.3	501.9
25°	527.7	532.4	540.4	549.3	557.0	557.0	551.0	541.3	525.6	507.4	488.3
27.5°	525.2	534.5	545.9	555.3	560.3	557.4	546.8	532.8	511.2	487.9	465.9
30°	528.2	542.6	554.8	561.2	562.0	552.3	534.1	513.3	487.9	460.0	437.5
32.5°	539.2	556.5	565.8	567.1	561.2	543.0	514.6	485.8	457.4	431.6	408.7
35°	561.6	576.4	579.8	574.7	559.9	529.4	488.8	454.9	429.5	404.9	381.2
37.5°	598.0	604.8	598.5	583.6	555.7	512.9	465.0	432.0	404.9	380.8	354.5
40°	649.7	642.1	623.9	594.6	551.0	494.7	446.4	413.4	383.3	356.6	330.4
42.5°	714.1	687.4	649.7	607.4	545.9	482.8	432.9	394.7	361.7	332.1	304.5
45°	786.1	736.5	685.3	621.8	544.2	475.6	416.8	371.9	333.3	303.7	276.6
47.5°	859.4	788.6	721.3	637.4	546.4	462.9	392.2	341.8	301.6	272.8	247.3
50°	933.5	847.1	763.2	657.8	545.1	437.1	358.7	307.5	270.2	244.4	221.5
52.5°	1008.0	909.3	806.4	676.0	528.2	396.4	321.9	278.3	242.3	217.3	194.8
55°	1081.3	969.9	848.8	681.5	479.0	353.7	291.0	249.0	213.5	188.1	163.5
57.5°	1150.8	1024.5	878.4	649.3	418.5	320.2	263.4	222.4	184.7	155.4	131.3
60°	1237.2	1076.6	886.9	571.4	370.2	292.2	238.5	191.4	149.1	118.2	96.1
62.5°	1331.6	1147.4	873.8	496.8	341.8	267.7	207.5	155.0	113.9	83.9	67.3
65°	1401.1	1176.6	807.3	457.0	324.0	243.5	174.5	120.3	78.8	57.6	51.2
67.5°	1493.4	1205.4	738.6	437.5	304.5	212.2	134.7	86.8	61.0	47.9	44.0
68°	1487.0	1197.3	724.2	432.4	298.6	201.2	127.1	85.1	59.3	46.6	42.8
70°	1401.1	1098.7	629.0	383.3	247.3	156.7	109.3	77.5	54.6	42.4	39.0
72.5°	1149.5	852.2	451.1	252.4	160.9	114.8	80.9	58.4	45.3	37.3	34.7
75°	813.6	532.8	226.2	145.3	101.2	66.5	45.7	37.7	33.5	29.6	29.6
77.5°	457.4	278.7	119.4	99.5	57.2	38.5	30.5	28.4	26.3	24.1	26.7
80°	149.1	145.3	88.1	68.2	39.8	28.4	23.7	22.4	21.2	19.1	23.7
82.5°	80.5	99.5	63.5	48.7	29.2	20.3	17.8	18.2	16.5	14.8	17.8
85°	36.0	47.4	42.4	33.9	18.2	11.4	9.3	11.0	9.7	8.9	8.5
87.5°	14.0	23.3	16.9	9.7	4.2	2.5	2.5	2.1	1.7	1.7	1.3
90°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
92.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
97.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
100°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
102.5°	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
105°	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8
107.5°	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7



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REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	
110°	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	0°
112.5°	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	2.5°
115°	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	5°
117.5°	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	7.5°
120°	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	10°
122.5°	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	12.5°
125°	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	15°
127.5°	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	17.5°
130°	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	20°
132.5°	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	22.5°
135°	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	25°
137.5°	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	27.5°
140°	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	30°
142.5°	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	32.5°
145°	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	35°
147.5°	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	37.5°
150°	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	40°
152.5°	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	42.5°
155°	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	45°
157.5°	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	47.5°
160°	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	50°
162.5°	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	52.5°
165°	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	55°
167.5°	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	57.5°
170°	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	60°
172.5°	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	62.5°
175°	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	65°
177.5°	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	67.5°
180°	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	68°
												70°
												72.5°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°

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DISTRIBUTION (continued):

160°	165°	170°	175°	180°
463.8	463.8	463.8	463.8	463.8
463.8	463.8	463.4	462.9	462.1
469.7	469.7	469.3	468.9	468.0
476.1	475.6	475.2	474.8	473.9
482.8	482.0	482.0	482.4	482.0
489.6	488.3	487.1	486.6	487.9
496.4	493.8	491.7	491.3	491.3
500.2	496.0	492.2	490.9	490.9
499.4	491.7	486.6	484.1	484.5
491.3	480.7	473.9	470.6	469.3
474.4	461.7	453.2	448.5	449.0
449.0	435.4	426.1	423.5	421.0
418.9	405.3	396.0	390.5	390.9
389.2	374.4	365.9	359.6	358.7
360.9	344.8	334.6	329.9	329.1
332.9	316.0	306.6	302.4	299.4
307.1	291.8	280.8	274.5	273.2
281.7	264.3	253.3	248.6	247.3
252.9	236.3	226.6	222.8	221.9
227.0	211.3	203.3	198.2	196.5
202.0	187.2	177.9	173.2	172.4
175.8	160.9	151.2	147.4	144.0
147.0	131.3	121.6	114.8	112.2
113.5	99.5	89.4	84.7	80.0
81.3	69.0	61.0	57.2	53.8
57.6	49.6	44.5	40.7	38.5
47.4	43.6	38.1	34.7	33.0
41.9	38.1	33.9	30.9	29.6
41.1	37.3	33.0	30.1	29.2
37.7	33.9	30.1	28.0	27.1
33.5	30.5	27.1	25.0	24.1
28.8	25.8	23.7	22.0	20.8
25.4	21.2	20.3	18.6	17.8
21.2	19.1	17.4	16.1	15.2
17.4	14.4	12.3	11.0	10.6
9.7	8.9	7.2	5.5	5.1
0.8	0.4	0.4	0.0	0.0
0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1
0.5	0.5	0.5	0.5	0.5
1.5	1.5	1.5	1.5	1.5
5.0	5.0	5.0	5.0	5.0
8.8	8.8	8.8	8.8	8.8
11.8	11.8	11.8	11.8	11.8
14.7	14.7	14.7	14.7	14.7

CANDELA DISTRIBUTION:

	160°
110°	17.8
112.5°	21.2
115°	25.0
117.5°	29.5
120°	34.8
122.5°	40.9
125°	47.8
127.5°	55.3
130°	63.0
132.5°	70.5
135°	77.9
137.5°	85.3
140°	92.5
142.5°	99.2
145°	104.9
147.5°	110.1
150°	115.1
152.5°	119.7
155°	123.7
157.5°	127.0
160°	130.3
162.5°	133.5
165°	136.0
167.5°	137.1
170°	137.4
172.5°	138.6
175°	140.5
177.5°	141.1
180°	140.8

'160164
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TION (continued):

165°	170°	175°	180°
17.8	17.8	17.8	17.8
21.2	21.2	21.2	21.2
25.0	25.0	25.0	25.0
29.5	29.5	29.5	29.5
34.8	34.8	34.8	34.8
40.9	40.9	40.9	40.9
47.8	47.8	47.8	47.8
55.3	55.3	55.3	55.3
63.0	63.0	63.0	63.0
70.5	70.5	70.5	70.5
77.9	77.9	77.9	77.9
85.3	85.3	85.3	85.3
92.5	92.5	92.5	92.5
99.2	99.2	99.2	99.2
104.9	104.9	104.9	104.9
110.1	110.1	110.1	110.1
115.1	115.1	115.1	115.1
119.7	119.7	119.7	119.7
123.7	123.7	123.7	123.7
127.0	127.0	127.0	127.0
130.3	130.3	130.3	130.3
133.5	133.5	133.5	133.5
136.0	136.0	136.0	136.0
137.1	137.1	137.1	137.1
137.4	137.4	137.4	137.4
138.6	138.6	138.6	138.6
140.5	140.5	140.5	140.5
141.1	141.1	141.1	141.1
140.8	140.8	140.8	140.8

(END OF REPORT)