

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: P401929

Luminaire Tested: **ENT-SA1F-827-U-T3-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401929
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-14)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1F-827-U-T3-HSS
Description: ENTRI LED LUMINAIRE
(1) 80 CRI, 2700K, 1200mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4398 lumens
Efficiency: N/A
Efficacy: 66.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 66.1
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

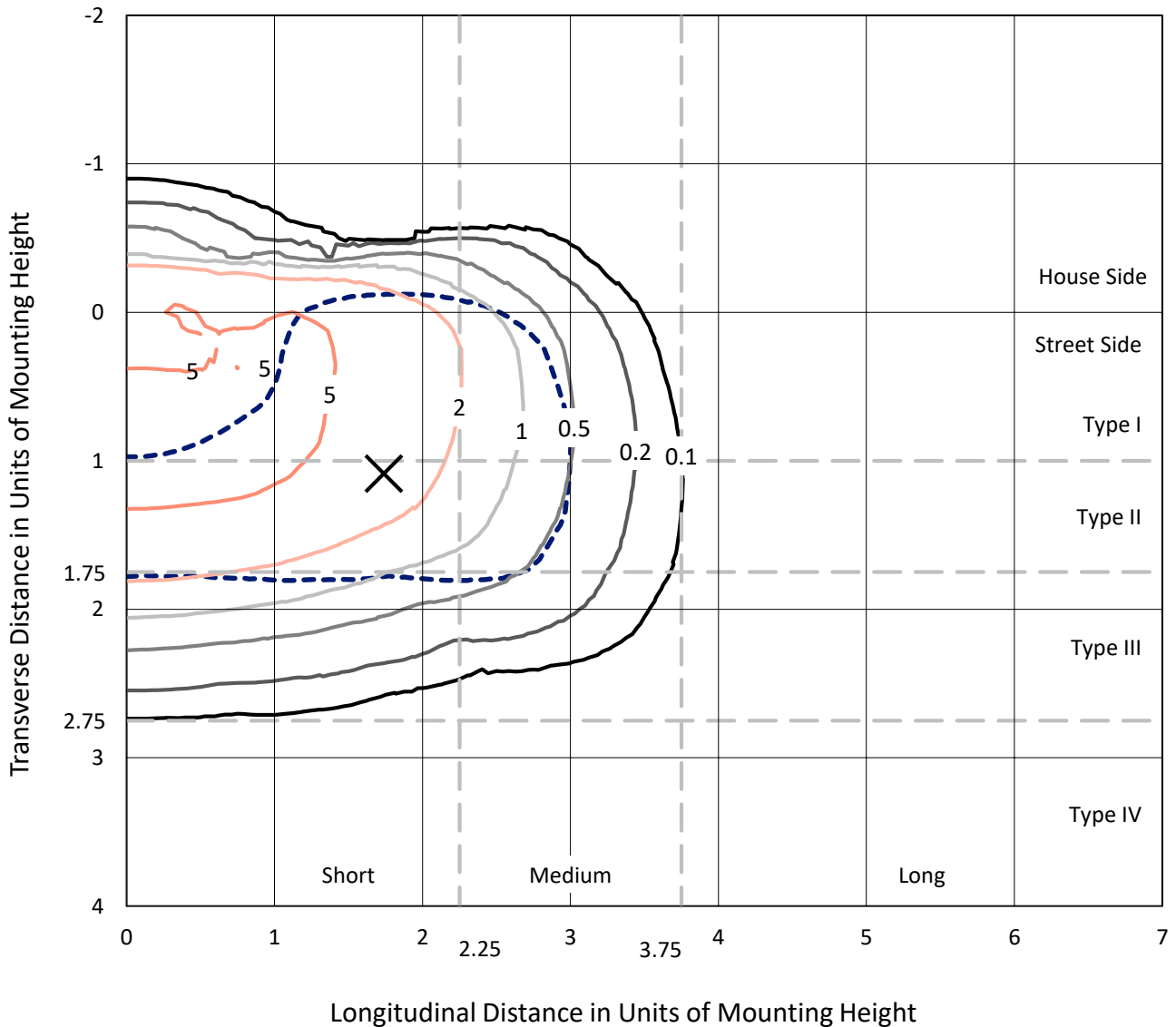


REPORT NUMBER: P401929

CATALOG NUMBER: ENT-SA1F-827-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

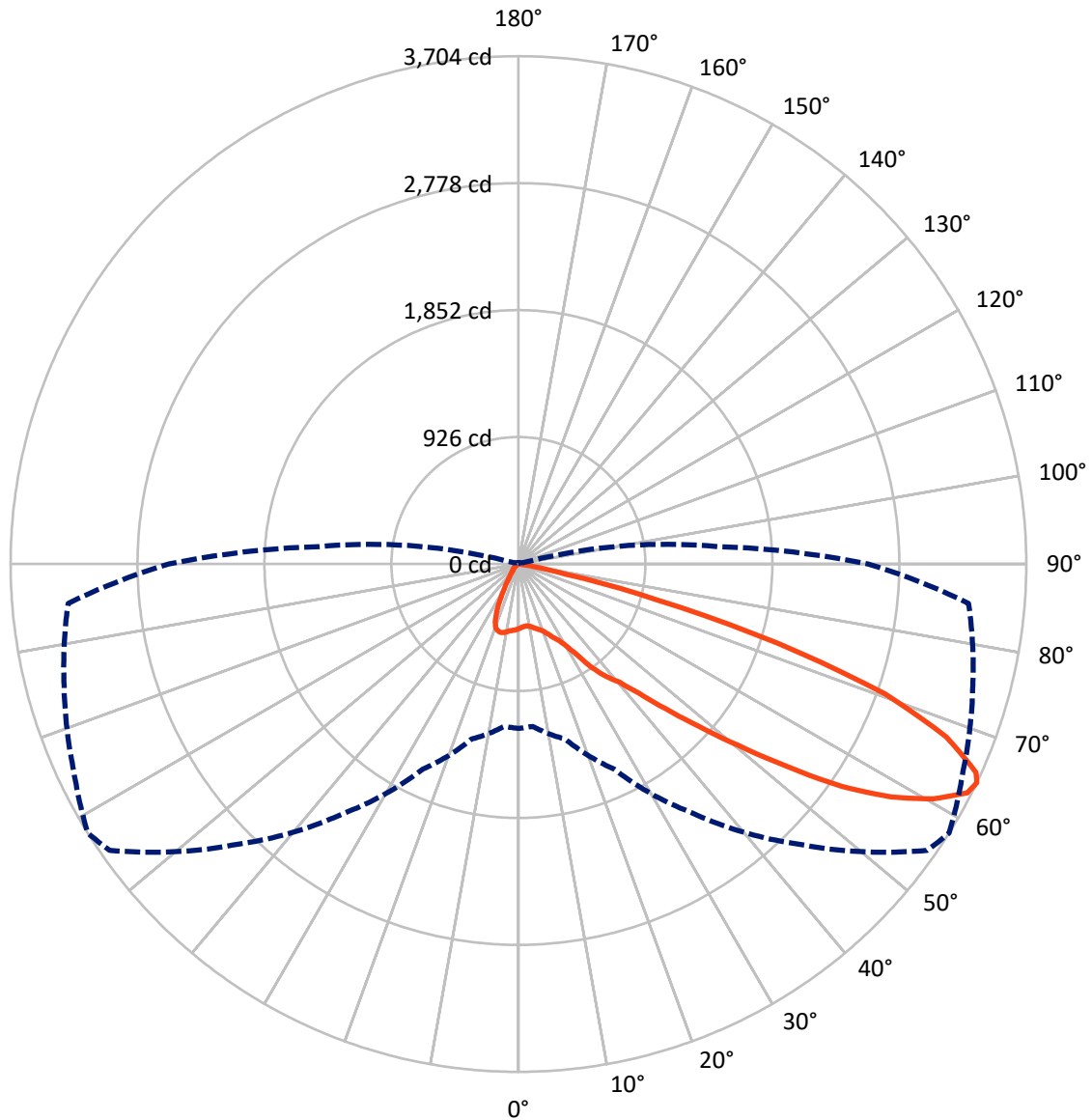


Based on 10 foot mounting height. Maximum calculated value = 7 fc
 Type III - Short - Full Cutoff

REPORT NUMBER: P401929

CATALOG NUMBER: ENT-SA1F-827-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 64-Deg Vertical

REPORT NUMBER: P401929

CATALOG NUMBER: ENT-SA1F-827-U-T3-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	524.3	0.0	524.3
	% Fixture	11.9	0.0	11.9
Street Side	Lumens	3873.7	0.0	3873.7
	% Fixture	88.1	0.0	88.1
Total	Lumens	4398.0	0.0	4398.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.5	1.0
10°-20°	129.8	3.0
20°-30°	233.2	5.3
30°-40°	408.7	9.3
40°-50°	747.3	17.0
50°-60°	1278.4	29.1
60°-70°	1240.2	28.2
70°-80°	307.2	7.0
80°-90°	8.7	0.2
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°-90°	4398.0	100.0
0°-180°	4398.0	100.0



REPORT NUMBER: P401929

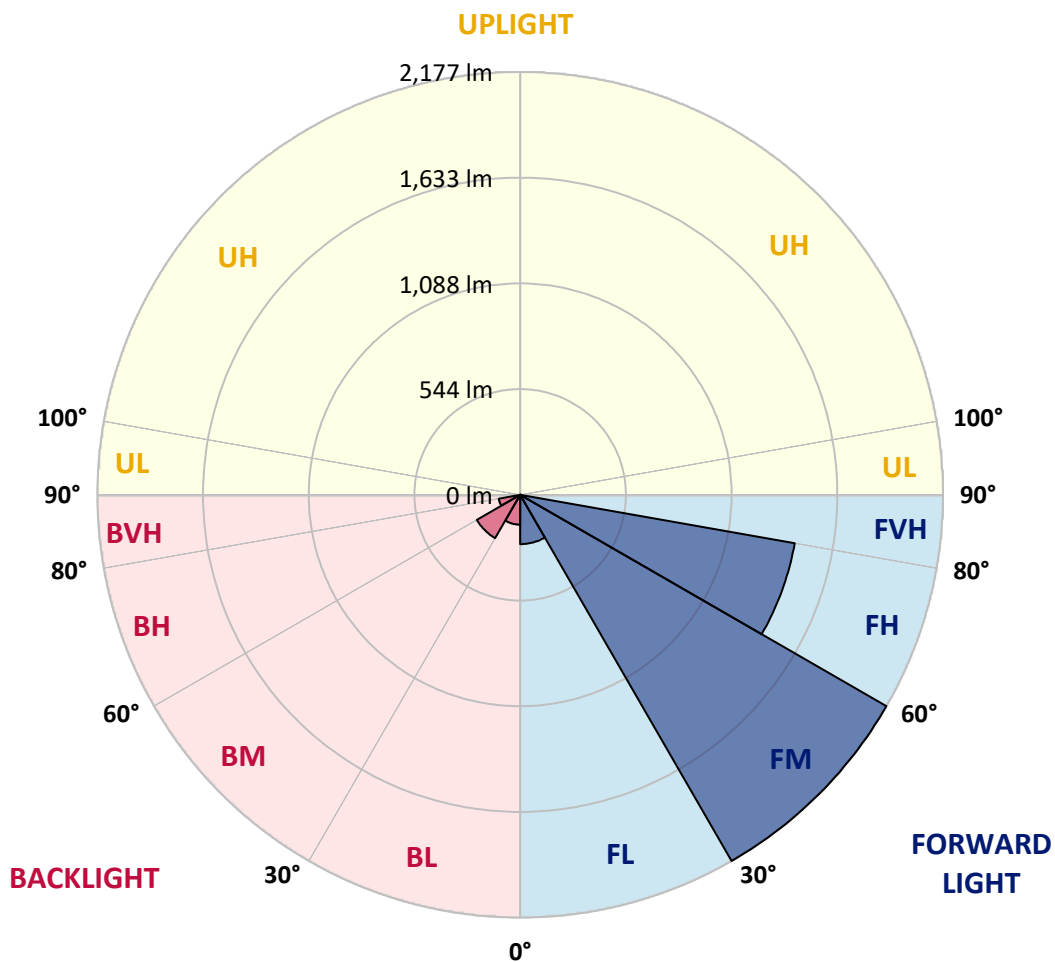
CATALOG NUMBER: ENT-SA1F-827-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	253.9	5.8			
FM	(30°-60°)	2176.9	49.5			
FH	(60°-80°)	1435.4	32.6			G1/1800
FVH	(80°-90°)	7.4	0.2			G0/10
BL	(0°-30°)	153.5	3.5	B1/500		
BM	(30°-60°)	257.5	5.9	B1/1000		
BH	(60°-80°)	112.0	2.5	B1/500		G1/500
BVH	(80°-90°)	1.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short





REPORT NUMBER: P401929

CATALOG NUMBER: ENT-SA1F-827-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	471.1	471.1	471.1	471.1	471.1	471.1	471.1	471.1	471.1	471.1	471.1
2.5°	451.6	451.6	453.2	454.0	456.5	458.9	462.1	463.0	464.6	468.7	470.3
5°	427.2	428.0	429.6	433.7	439.4	445.9	454.0	456.5	463.0	471.1	476.8
7.5°	417.4	418.2	420.7	425.5	432.9	442.6	452.4	455.6	464.6	477.6	485.7
10°	415.8	415.8	419.0	426.3	435.3	447.5	458.1	462.1	474.4	489.8	502.8
12.5°	415.8	415.8	419.8	428.8	439.4	454.8	469.5	475.2	489.0	508.5	524.8
15°	423.1	424.7	427.2	432.9	445.1	462.1	482.5	489.0	506.1	529.7	550.0
17.5°	475.2	473.5	465.4	458.1	455.6	470.3	494.7	503.6	528.9	559.0	580.9
20°	576.1	575.2	560.6	524.8	493.1	484.9	513.4	524.0	560.6	600.5	616.7
22.5°	698.1	702.2	679.4	631.4	566.3	524.8	541.1	555.7	602.9	650.9	660.7
25°	819.3	824.2	803.1	742.9	663.1	590.7	579.3	592.3	646.0	694.0	690.0
27.5°	962.5	958.5	937.3	869.0	776.2	679.4	630.6	633.0	674.5	728.2	715.2
30°	1067.5	1061.8	1041.5	995.1	908.0	797.4	703.8	696.5	708.7	768.1	754.2
32.5°	1163.5	1167.6	1152.1	1090.3	1008.1	918.6	813.6	794.1	789.2	839.7	816.9
35°	1258.7	1257.9	1252.2	1197.7	1117.1	1032.5	944.6	930.8	929.2	978.0	916.2
37.5°	1372.6	1366.9	1356.3	1301.0	1236.7	1156.2	1062.6	1040.6	1036.6	1046.3	973.9
40°	1494.7	1502.0	1484.9	1427.1	1357.2	1296.9	1165.9	1132.6	1104.9	1133.4	1087.0
42.5°	1676.1	1681.8	1651.7	1611.8	1521.5	1465.4	1332.7	1287.2	1274.2	1317.3	1265.2
45°	1903.9	1893.3	1873.0	1845.3	1770.5	1685.1	1546.7	1503.6	1489.8	1563.8	1478.4
47.5°	2081.3	2079.7	2080.5	2074.8	2063.4	1960.9	1796.5	1767.2	1753.4	1860.0	1765.6
50°	2193.6	2200.1	2227.8	2298.5	2350.6	2307.5	2114.7	2078.9	2068.3	2178.9	2051.2
52.5°	2278.2	2293.7	2340.0	2480.0	2646.8	2661.4	2501.9	2451.5	2427.1	2458.0	2280.6
55°	2321.3	2328.6	2399.4	2606.1	2867.3	2972.2	2905.5	2863.2	2764.8	2706.2	2550.0
57.5°	2220.4	2209.0	2331.1	2593.9	2981.2	3222.8	3251.3	3203.3	3045.5	2999.9	2877.0
60°	1956.0	1951.1	2088.6	2404.3	2881.9	3281.4	3507.6	3477.5	3332.7	3224.5	3108.9
62.5°	1492.2	1500.4	1646.0	1967.4	2528.0	3113.0	3650.0	3674.4	3520.6	3359.5	3280.6
64°	1198.5	1188.7	1322.2	1649.3	2218.0	2888.4	3639.4	3703.7	3577.6	3430.3	3296.1
65°	1006.5	985.3	1113.1	1409.2	1956.0	2725.7	3564.6	3667.9	3581.7	3447.4	3239.9
67.5°	529.7	541.1	595.6	856.0	1320.5	2061.0	3209.8	3366.0	3401.0	3213.9	2823.3
70°	237.6	239.2	274.2	436.9	730.7	1336.8	2581.7	2834.7	2854.3	2640.3	2045.5
72.5°	78.9	79.7	121.2	174.9	306.7	619.2	1743.6	1973.9	2016.2	1711.9	1109.8
75°	48.8	50.4	64.3	94.4	142.4	216.4	883.6	1039.8	1048.8	759.1	403.6
77.5°	30.9	32.5	39.1	56.1	78.1	82.2	289.7	350.7	397.1	273.4	125.3
80°	19.5	19.5	25.2	34.2	40.7	35.0	78.9	104.1	125.3	91.9	42.3
82.5°	7.3	7.3	13.0	18.7	17.1	12.2	21.2	27.7	48.0	45.6	20.3
85°	0.0	0.0	0.8	1.6	0.8	1.6	4.1	5.7	9.0	13.0	6.5
87.5°	0.0	0.0	0.0	0.0	0.8	0.8	1.6	1.6	1.6	1.6	1.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P401929

CATALOG NUMBER: ENT-SA1F-827-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	471.1	471.1	471.1	471.1	471.1	471.1	471.1	471.1	471.1	471.1	471.1
2.5°	472.7	474.4	477.6	478.4	479.2	476.8	479.2	476.8	478.4	478.4	478.4
5°	480.0	482.5	484.9	485.7	484.9	479.2	480.9	476.8	476.0	476.0	476.0
7.5°	489.8	492.3	496.3	493.9	489.0	480.9	480.0	474.4	471.9	471.9	472.7
10°	507.7	510.2	511.8	506.9	497.1	484.9	476.0	463.8	458.1	455.6	455.6
12.5°	530.5	532.9	532.1	524.0	506.1	480.9	455.6	432.0	415.0	408.4	401.9
15°	554.9	558.2	556.5	539.4	505.3	460.5	411.7	356.4	322.2	300.2	296.2
17.5°	583.4	586.6	578.5	547.6	493.1	417.4	324.6	249.8	200.2	181.4	180.6
20°	618.4	616.7	597.2	548.4	471.1	337.7	217.2	156.2	135.1	130.2	129.4
22.5°	658.2	650.9	615.1	543.5	410.9	229.4	139.9	123.7	121.2	119.6	119.6
25°	681.0	668.0	621.6	529.7	316.5	146.5	118.8	115.5	112.3	109.0	108.2
27.5°	698.9	679.4	624.1	484.1	210.7	112.3	107.4	104.1	99.3	94.4	93.6
30°	731.5	702.2	628.1	404.4	129.4	96.0	93.6	87.9	80.6	75.7	74.0
32.5°	790.0	747.7	644.4	302.7	94.4	84.6	78.1	70.8	62.7	57.8	57.8
35°	852.7	790.9	652.5	199.3	82.2	74.0	64.3	55.3	48.0	43.9	43.1
37.5°	910.5	852.7	650.1	122.0	73.2	63.5	52.9	43.9	37.4	34.2	34.2
40°	1028.4	960.9	616.7	83.8	64.3	53.7	43.1	34.2	30.1	27.7	27.7
42.5°	1196.9	1079.7	542.7	71.6	56.1	44.8	34.2	28.5	25.2	22.8	22.8
45°	1385.6	1210.7	432.9	64.3	48.8	37.4	28.5	23.6	20.3	19.5	19.5
47.5°	1633.0	1369.4	318.1	57.8	42.3	31.7	23.6	19.5	17.9	17.1	17.1
50°	1849.4	1497.9	217.2	50.4	37.4	26.9	20.3	17.9	16.3	15.5	15.5
52.5°	2046.3	1587.4	143.2	43.9	33.4	22.0	18.7	16.3	15.5	14.6	14.6
55°	2278.2	1655.8	96.8	38.2	29.3	20.3	17.9	16.3	14.6	14.6	13.8
57.5°	2475.1	1696.4	69.2	32.5	26.0	18.7	17.1	15.5	13.8	13.0	13.0
60°	2589.8	1648.4	50.4	28.5	22.8	17.1	15.5	13.8	13.0	12.2	12.2
62.5°	2621.6	1555.7	39.1	24.4	19.5	15.5	13.8	12.2	11.4	10.6	10.6
64°	2548.3	1456.4	33.4	21.2	17.1	13.8	13.0	11.4	9.8	8.1	8.1
65°	2445.0	1364.5	30.1	19.5	15.5	13.0	12.2	10.6	8.1	6.5	6.5
67.5°	2037.4	1087.8	24.4	16.3	12.2	11.4	9.8	8.1	5.7	4.1	4.1
70°	1446.7	760.8	18.7	13.0	10.6	10.6	9.0	6.5	3.3	1.6	1.6
72.5°	765.6	395.4	15.5	10.6	8.1	8.1	7.3	4.1	2.4	1.6	0.8
75°	267.7	130.2	13.0	9.0	7.3	5.7	4.9	3.3	2.4	1.6	0.8
77.5°	81.4	43.1	11.4	9.0	6.5	4.9	5.7	4.9	4.9	3.3	2.4
80°	26.0	15.5	6.5	5.7	6.5	6.5	5.7	4.9	5.7	4.1	3.3
82.5°	9.8	5.7	2.4	3.3	3.3	4.1	4.1	3.3	2.4	0.8	0.0
85°	3.3	2.4	1.6	2.4	2.4	2.4	1.6	1.6	0.8	0.0	0.0
87.5°	1.6	1.6	1.6	1.6	1.6	1.6	0.8	0.8	0.0	0.0	0.0
90°	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)