

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: P401441

Luminaire Tested: **ENT-SA1D-727-U-T2-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401441  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1D-727-U-T2-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 2700K, 800mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3573 lumens  
Efficiency: N/A  
Efficacy: 82.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium - Semi-Cutoff  
BUG Rating: B0 - U0 - G1

Input Watts (W): 43.1  
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

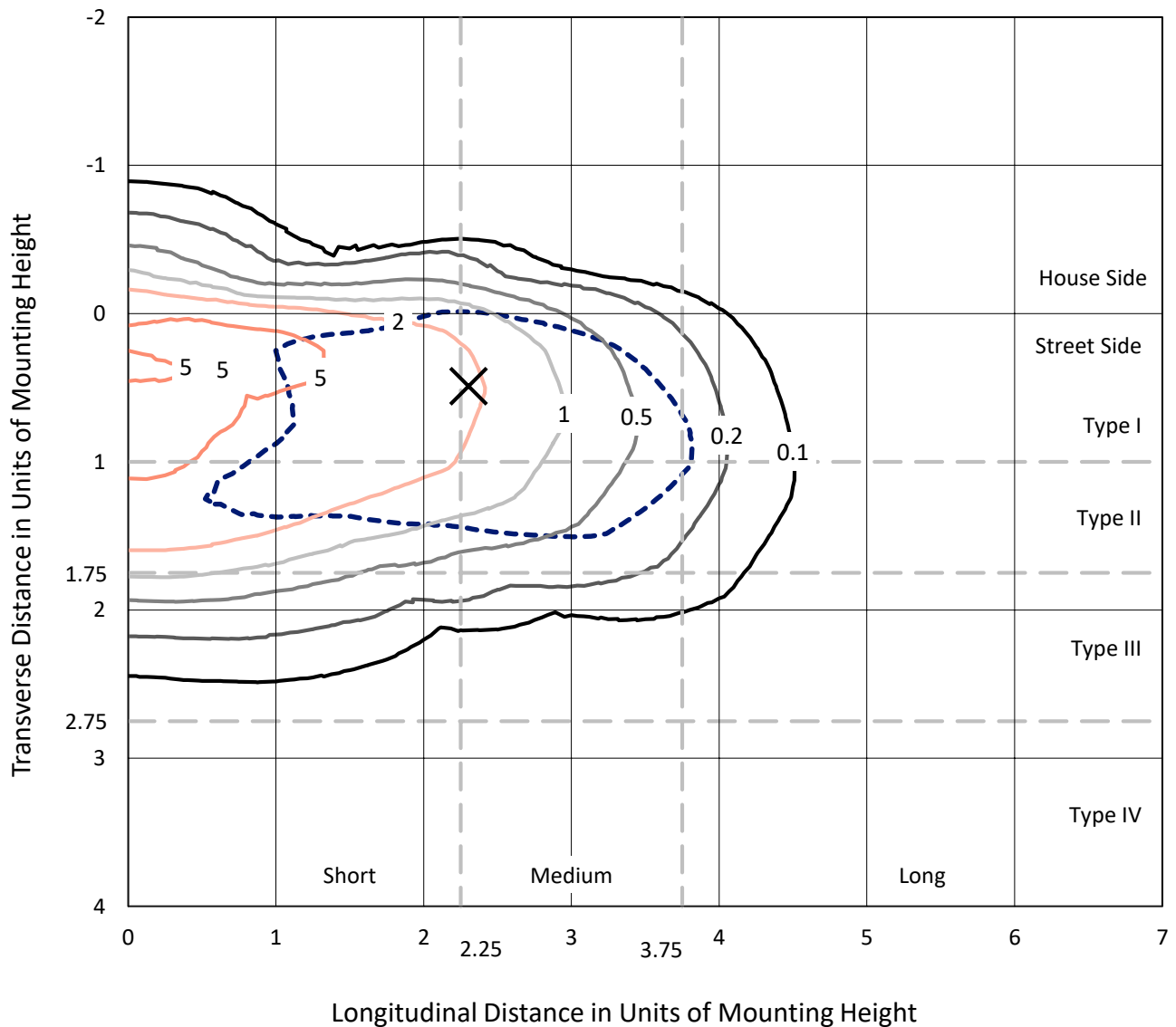


REPORT NUMBER: P401441

CATALOG NUMBER: ENT-SA1D-727-U-T2-HSS

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

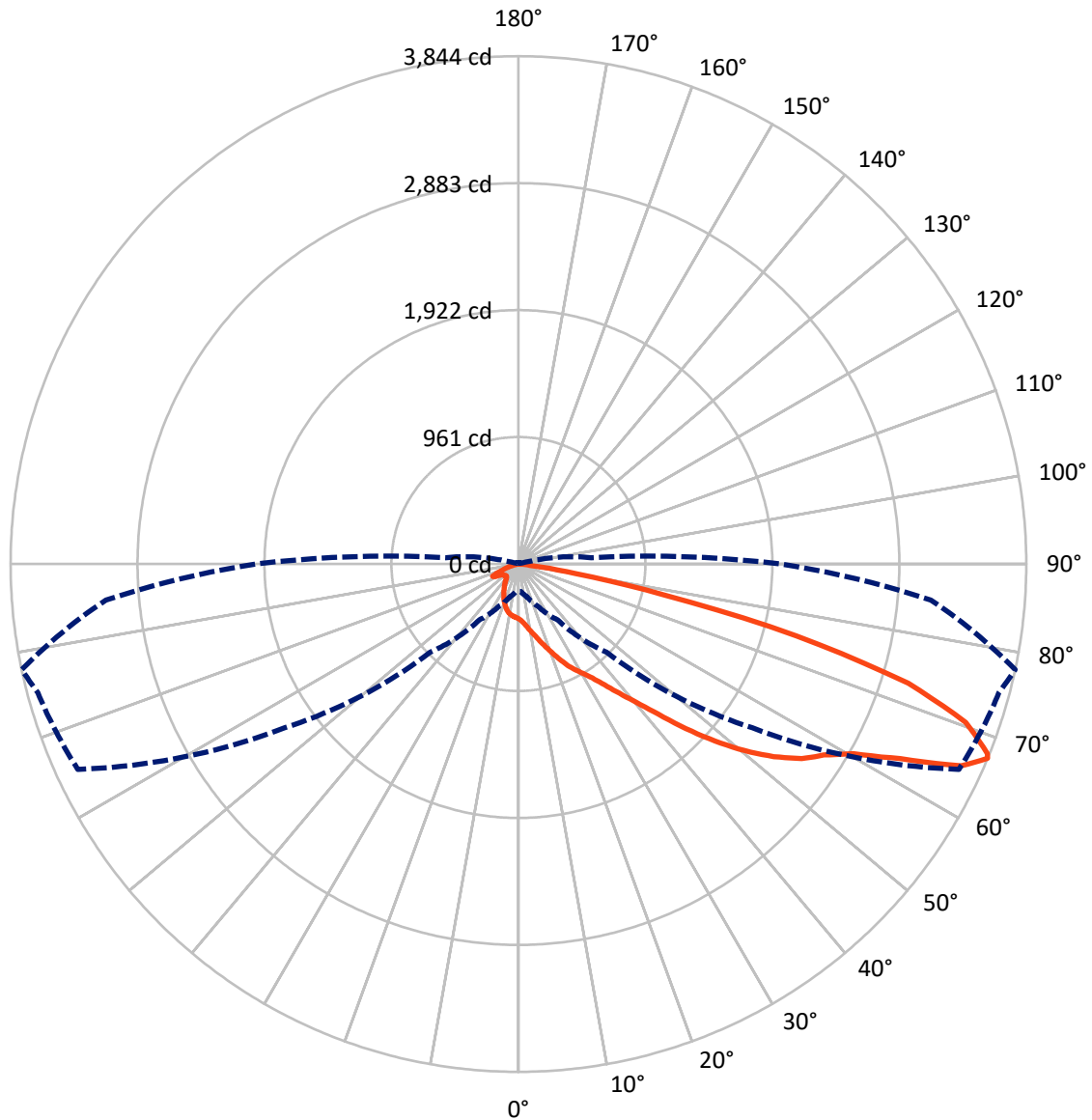


Based on 10 foot mounting height. Maximum calculated value = 6.5 fc  
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P401441

CATALOG NUMBER: ENT-SA1D-727-U-T2-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 78-Deg Lateral      - - - Horizontal Cone Through 67-Deg Vertical

REPORT NUMBER: P401441

CATALOG NUMBER: ENT-SA1D-727-U-T2-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	252.1	0.0	252.1
	% Fixture	7.1	0.0	7.1
<b>Street Side</b>	Lumens	3320.9	0.0	3320.9
	% Fixture	92.9	0.0	92.9
<b>Total</b>	Lumens	3573.0	0.0	3573.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.0	1.1
10°-20°	114.5	3.2
20°-30°	202.4	5.7
30°-40°	356.8	10.0
40°-50°	613.2	17.2
50°-60°	923.1	25.8
60°-70°	908.4	25.4
70°-80°	396.9	11.1
80°-90°	17.6	0.5
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°	3573.0	100.0
0°-180°	3573.0	100.0



REPORT NUMBER: P401441

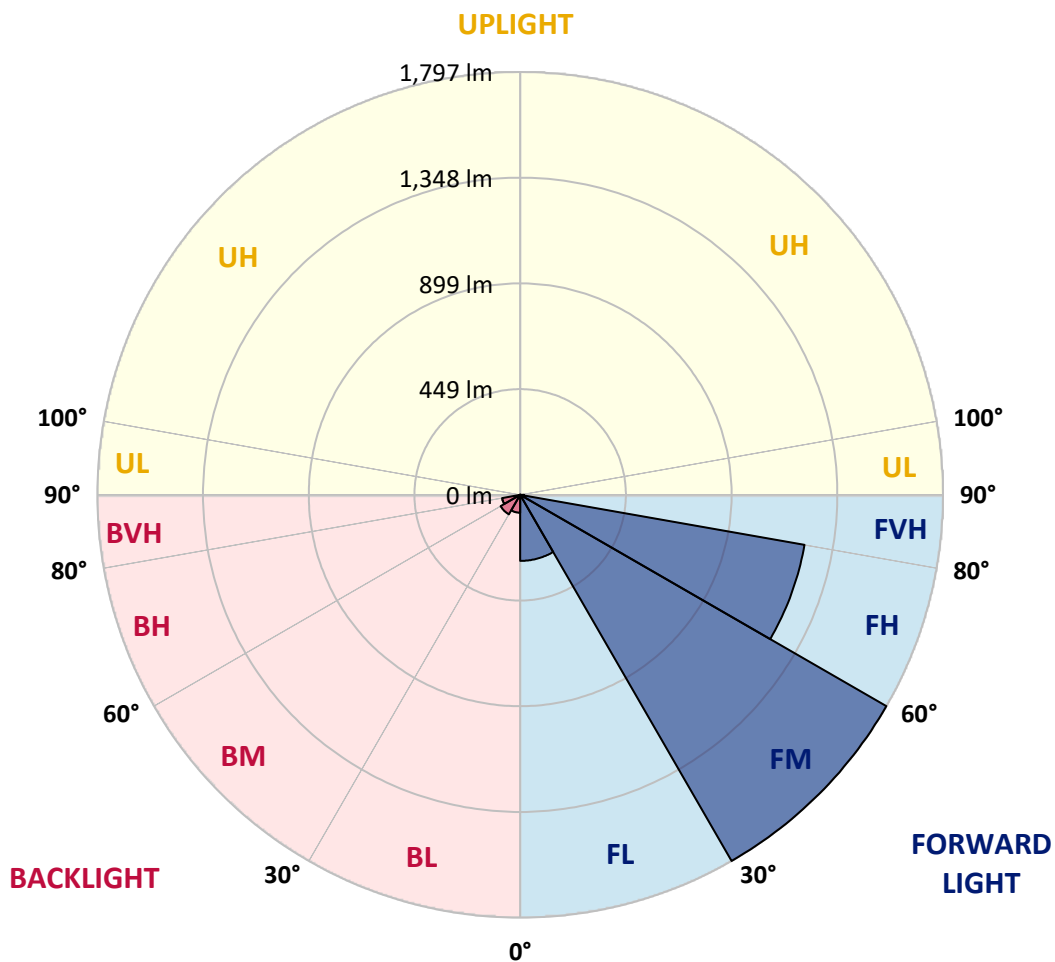
CATALOG NUMBER: ENT-SA1D-727-U-T2-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	280.7	7.9			
FM (30°-60°)	1797.3	50.3			
FH (60°-80°)	1227.1	34.3			G1/1800
FVH (80°-90°)	15.8	0.4			G1/100
BL (0°-30°)	76.2	2.1	B0/110		
BM (30°-60°)	95.9	2.7	B0/220		
BH (60°-80°)	78.2	2.2	B0/110		G0/110
BVH (80°-90°)	1.8	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**

Type II Medium





REPORT NUMBER: P401441

CATALOG NUMBER: ENT-SA1D-727-U-T2-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	414.8	414.8	414.8	414.8	414.8	414.8	414.8	414.8	414.8	414.8	414.8
2.5°	475.9	477.9	475.3	473.2	467.9	461.2	454.5	444.4	433.6	429.6	422.9
5°	534.3	534.3	534.3	529.0	524.3	511.5	496.1	480.6	460.5	453.1	437.7
7.5°	565.2	565.9	567.9	567.9	565.2	556.5	539.7	522.2	492.0	482.0	457.1
10°	568.6	571.3	576.6	584.7	590.7	595.4	585.3	566.6	530.3	518.2	482.0
12.5°	559.8	561.2	569.9	584.7	604.1	623.6	624.3	612.9	572.6	555.8	512.2
15°	539.7	541.7	554.5	578.0	608.2	643.1	663.2	659.9	622.3	602.8	545.7
17.5°	507.5	509.5	525.6	560.5	604.8	655.8	698.8	715.6	671.3	652.5	580.0
20°	506.1	506.8	512.9	539.0	591.4	663.2	733.7	773.3	731.0	710.9	620.3
22.5°	592.1	586.7	573.3	556.5	579.3	661.2	765.2	834.4	804.9	773.3	666.6
25°	688.1	690.1	675.3	635.7	606.8	657.8	789.4	903.5	874.0	842.4	714.2
27.5°	788.7	785.4	772.6	736.4	688.1	682.0	806.9	959.2	940.5	902.2	756.5
30°	886.7	884.1	874.7	837.7	785.4	744.4	820.3	1009.6	1003.6	961.3	790.8
32.5°	998.9	1003.6	991.5	943.1	879.4	829.0	849.2	1062.6	1080.1	1028.4	826.3
35°	1129.1	1129.1	1104.2	1059.9	994.2	923.7	906.9	1121.0	1177.4	1121.7	882.7
37.5°	1236.5	1245.2	1230.4	1166.7	1104.9	1031.1	994.8	1192.8	1297.6	1241.2	958.6
40°	1321.1	1335.8	1336.5	1273.4	1216.3	1168.0	1117.7	1294.2	1448.6	1376.1	1049.2
42.5°	1399.6	1402.3	1413.7	1377.4	1320.4	1307.6	1255.9	1414.4	1637.2	1552.0	1170.0
45°	1499.6	1505.0	1498.3	1471.4	1422.4	1439.2	1410.3	1566.7	1849.4	1777.5	1312.3
47.5°	1646.6	1659.4	1649.3	1601.0	1541.2	1572.8	1552.0	1718.5	2089.0	2001.7	1466.7
50°	1784.2	1794.3	1805.0	1789.6	1729.9	1699.7	1674.2	1878.9	2294.4	2220.6	1618.4
52.5°	1799.0	1808.4	1867.5	1921.8	1961.5	1882.2	1802.4	2041.3	2484.4	2422.6	1757.4
55°	1703.0	1709.1	1807.7	1915.1	2097.1	2123.9	1991.0	2201.8	2643.5	2601.2	1850.7
57.5°	1435.8	1461.4	1601.7	1766.1	2063.5	2267.6	2258.8	2388.4	2746.8	2727.4	1970.9
60°	943.1	971.3	1139.1	1388.2	1816.5	2229.3	2552.8	2668.3	2891.8	2913.3	2181.6
62.5°	488.7	521.6	669.3	890.1	1316.4	1941.3	2652.9	3128.1	3169.7	3242.9	2557.5
65°	279.2	286.0	359.8	521.6	814.9	1390.2	2532.7	3583.2	3535.6	3683.9	3037.5
67°	207.4	207.4	259.1	354.4	516.2	945.2	2160.2	3679.2	3765.8	3844.4	3134.2
67.5°	185.9	196.0	240.3	326.9	463.2	838.4	2021.2	3653.7	3780.6	3829.6	3100.6
70°	127.5	134.3	172.5	234.3	312.1	436.3	1325.1	3231.5	3642.3	3592.6	2809.9
72.5°	76.5	79.2	114.1	168.5	232.9	233.6	723.0	2452.8	3086.5	3085.8	2295.1
75°	47.7	50.3	67.1	112.8	163.1	146.3	334.3	1668.8	2216.5	2173.6	1537.9
77.5°	26.9	30.9	40.3	61.8	103.4	93.3	141.0	935.1	1197.5	1123.7	763.9
80°	10.7	12.8	22.8	29.5	58.4	55.7	57.7	328.9	484.7	437.0	255.8
82.5°	2.7	3.4	8.1	14.1	22.8	22.8	18.1	90.0	114.8	106.7	65.8
85°	0.0	0.0	0.7	0.7	0.7	1.3	4.7	10.1	12.1	14.1	10.7
87.5°	0.0	0.0	0.0	0.7	0.7	0.7	1.3	2.0	2.0	2.0	2.0
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: P401441

CATALOG NUMBER: ENT-SA1D-727-U-T2-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	414.8	414.8	414.8	414.8	414.8	414.8	414.8	414.8	414.8	414.8	414.8
2.5°	417.5	412.8	403.4	393.4	383.3	375.2	368.5	359.1	357.8	357.8	357.8
5°	426.3	415.5	394.0	372.6	351.1	331.6	317.5	306.1	296.0	292.7	295.4
7.5°	439.0	419.5	382.0	344.4	310.8	283.3	263.1	247.0	239.6	235.6	232.3
10°	455.8	425.6	365.8	310.8	268.5	235.6	214.1	198.7	191.3	186.6	187.3
12.5°	473.9	430.3	345.7	274.5	227.6	197.4	179.2	166.5	154.4	147.0	149.0
15°	492.0	433.6	320.9	241.0	196.0	169.2	143.7	120.8	112.8	111.4	110.8
17.5°	512.2	433.0	293.3	209.4	169.2	131.6	106.1	103.4	102.7	102.7	102.0
20°	533.0	429.6	261.8	183.3	142.3	100.0	96.0	94.6	92.6	92.0	91.3
22.5°	555.8	423.6	232.9	160.4	106.1	91.3	85.9	81.9	78.5	76.5	77.2
25°	576.6	412.2	204.7	139.0	90.6	81.9	74.5	68.5	65.1	62.4	63.1
27.5°	590.7	392.0	180.6	112.1	83.2	72.5	63.8	57.7	53.0	51.0	51.0
30°	592.1	363.2	159.1	92.0	75.9	63.8	54.4	47.7	45.0	43.6	43.0
32.5°	590.7	333.6	143.0	84.6	69.1	55.7	46.3	41.6	38.9	37.6	37.6
35°	597.4	303.4	128.2	77.9	61.8	49.0	40.9	36.2	34.2	32.9	32.9
37.5°	617.6	282.6	112.8	71.2	55.0	43.0	36.9	32.9	30.9	29.5	29.5
40°	645.1	265.2	94.0	64.4	48.3	38.9	33.6	30.2	27.5	26.2	26.2
42.5°	693.4	258.4	78.5	57.7	42.3	34.9	30.9	26.9	24.2	22.8	22.8
45°	765.2	261.8	71.8	51.7	38.3	31.5	27.5	23.5	20.8	20.1	20.1
47.5°	844.5	275.9	67.1	46.3	34.9	29.5	24.8	20.8	18.1	17.5	17.5
50°	933.1	298.0	63.1	40.9	31.5	26.9	22.2	18.1	16.1	15.4	15.4
52.5°	1017.6	326.2	59.1	36.9	29.5	24.2	19.5	16.1	14.8	14.1	14.1
55°	1082.1	344.4	55.7	34.2	27.5	22.2	17.5	15.4	13.4	12.8	12.8
57.5°	1172.0	374.6	51.7	30.9	24.8	20.1	16.1	14.1	12.1	12.1	12.1
60°	1354.6	455.8	45.6	28.2	22.2	18.1	15.4	12.8	11.4	10.7	10.7
62.5°	1683.5	590.0	39.6	26.2	19.5	16.1	13.4	11.4	10.1	8.7	8.7
65°	2000.4	645.8	33.6	22.8	17.5	14.1	12.1	10.1	7.4	6.0	6.0
67°	1982.9	552.5	28.2	19.5	14.8	12.8	10.1	8.1	5.4	3.4	3.4
67.5°	1935.9	514.2	27.5	18.8	14.1	12.1	10.1	7.4	4.7	2.7	2.7
70°	1645.3	359.8	21.5	14.8	12.1	10.7	8.1	5.4	2.7	1.3	1.3
72.5°	1336.5	285.3	16.8	12.1	10.1	8.1	6.7	3.4	2.0	0.7	0.7
75°	945.2	175.2	14.8	10.7	8.1	6.0	5.4	3.4	2.0	1.3	0.7
77.5°	466.5	80.6	12.1	9.4	7.4	6.0	4.7	4.0	3.4	2.7	1.3
80°	136.9	26.2	8.1	6.7	6.7	6.0	5.4	4.7	4.0	3.4	2.0
82.5°	30.9	9.4	2.7	3.4	4.7	4.7	4.7	3.4	2.7	1.3	0.7
85°	4.0	2.0	2.0	2.0	2.7	2.7	2.0	1.3	1.3	0.0	0.0
87.5°	1.3	1.3	1.3	2.0	2.0	2.0	1.3	0.7	0.7	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)