

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: P401443

Luminaire Tested: **ENV-SA1D-727-U-T3-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401443  
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: ENV-SA1D-727-U-T3-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 2700K, 800mA 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: 3628 lumens  
Efficiency: N/A  
Efficacy: 84.2 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): 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

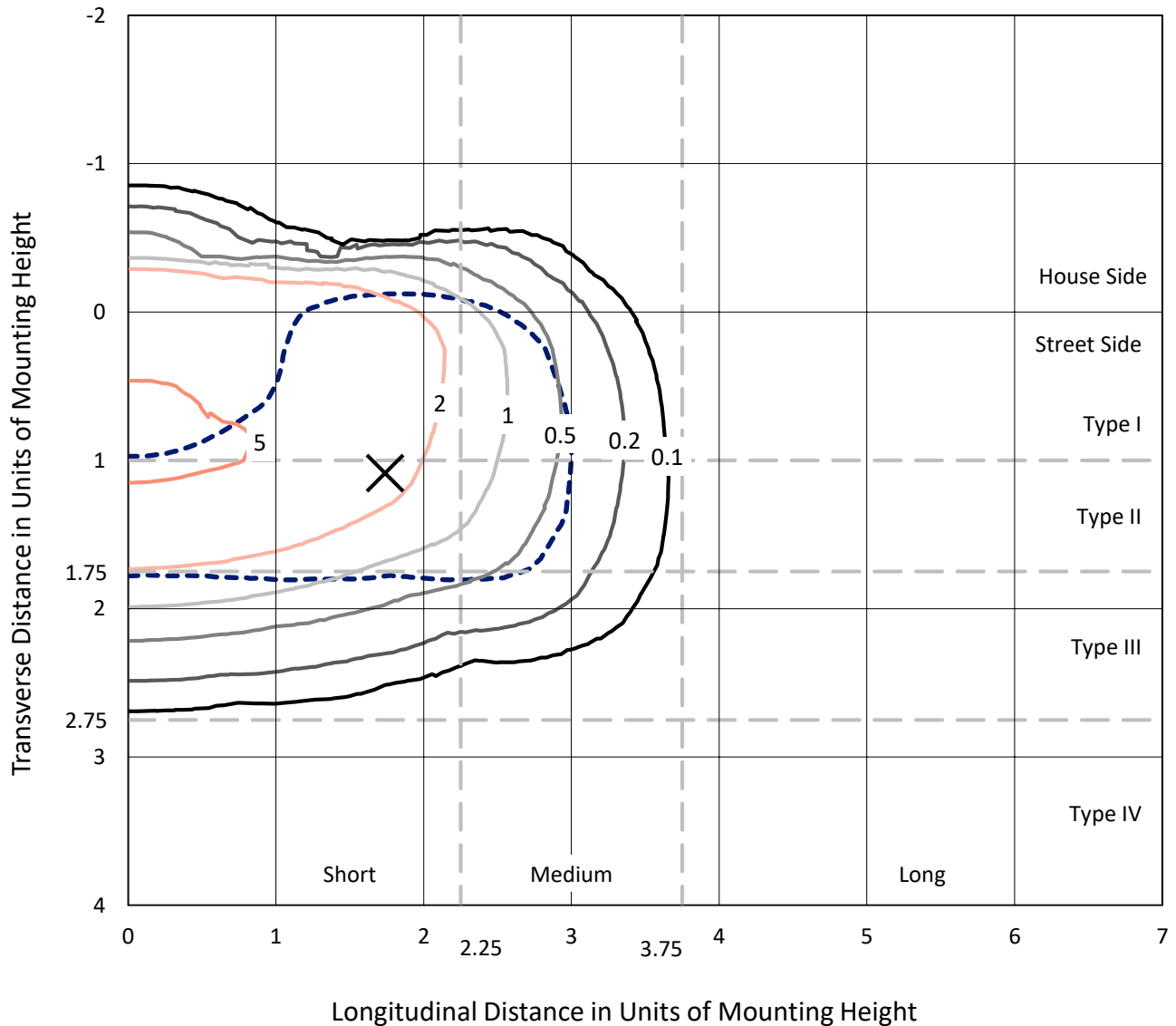


REPORT NUMBER: P401443

CATALOG NUMBER: ENV-SA1D-727-U-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

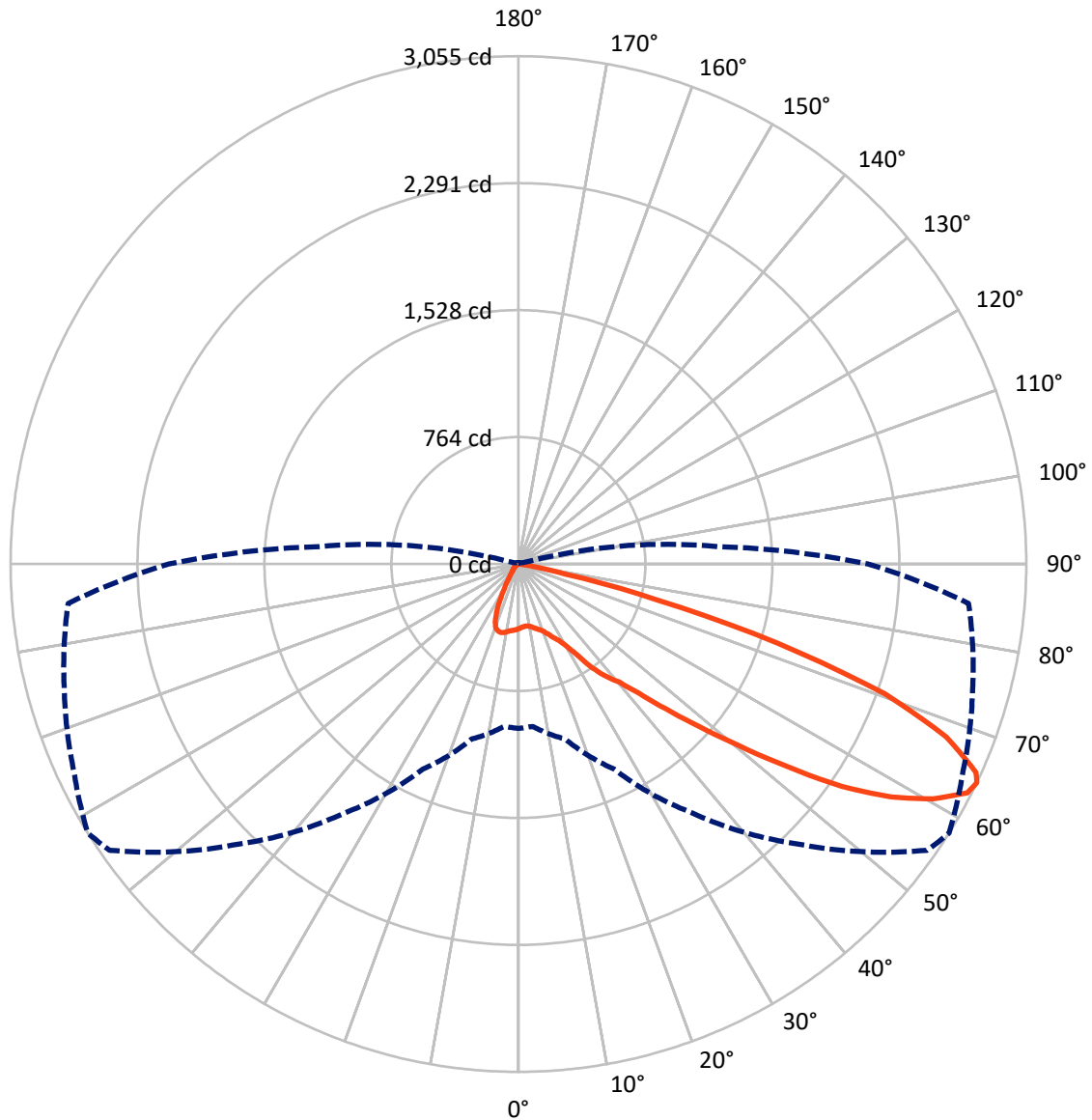


Based on 10 foot mounting height. Maximum calculated value = 5.8 fc  
 Type III - Short - Full Cutoff

REPORT NUMBER: P401443

CATALOG NUMBER: ENV-SA1D-727-U-T3-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P401443

CATALOG NUMBER: ENV-SA1D-727-U-T3-HSS

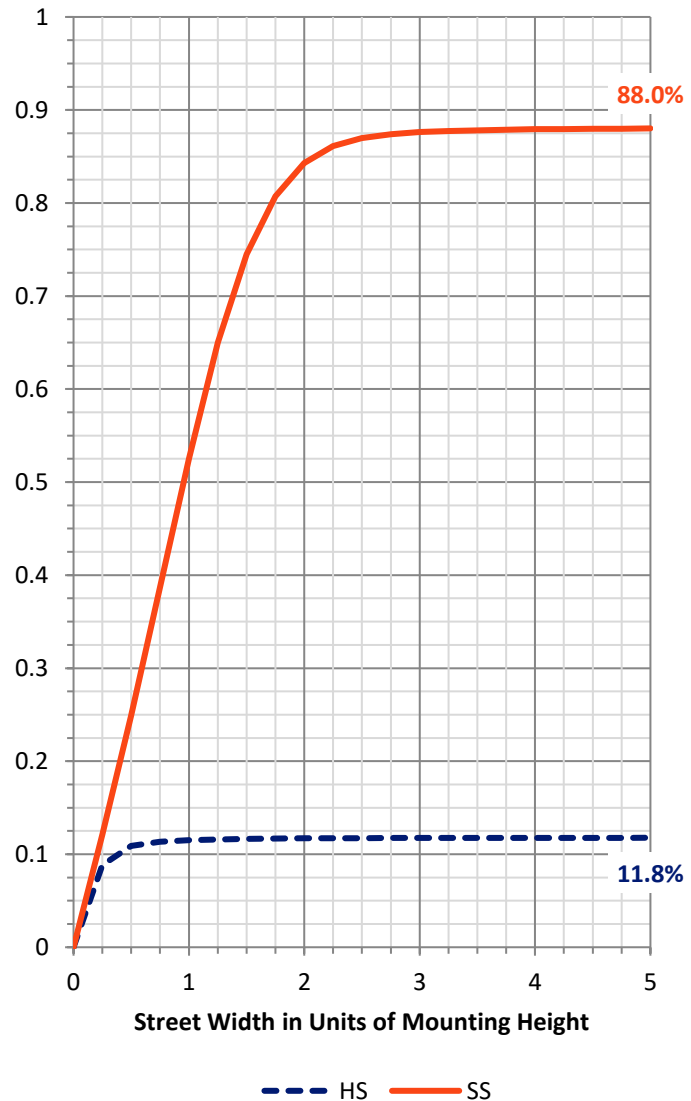
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	432.5	0.0	432.5
	% Fixture	11.9	0.0	11.9
<b>Street Side</b>	Lumens	3195.5	0.0	3195.5
	% Fixture	88.1	0.0	88.1
<b>Total</b>	Lumens	3628.0	0.0	3628.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.7	1.0
10°-20°	107.0	3.0
20°-30°	192.3	5.3
30°-40°	337.2	9.3
40°-50°	616.5	17.0
50°-60°	1054.6	29.1
60°-70°	1023.0	28.2
70°-80°	253.4	7.0
80°-90°	7.2	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°	3628.0	100.0
0°-180°	3628.0	100.0



REPORT NUMBER: P401443

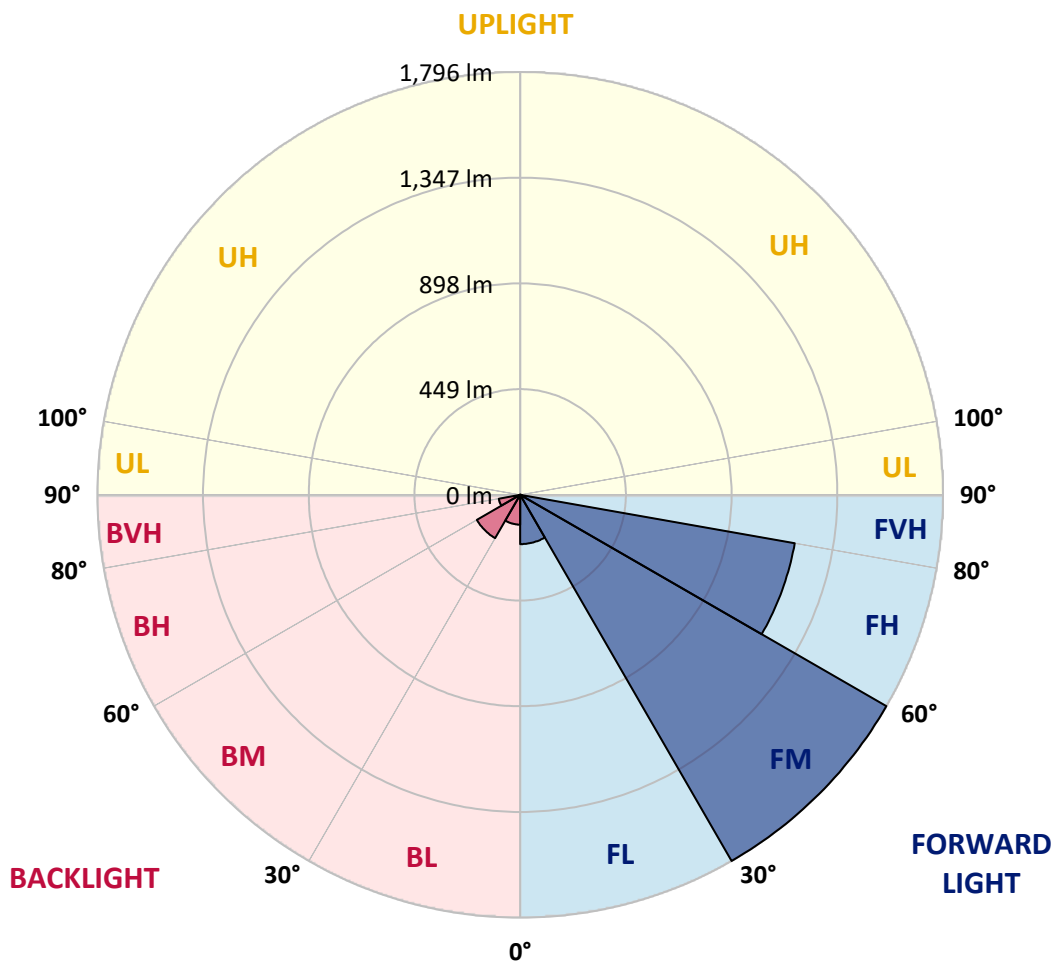
CATALOG NUMBER: ENV-SA1D-727-U-T3-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	209.5	5.8			
FM	(30°-60°)	1795.8	49.5			
FH	(60°-80°)	1184.1	32.6			G1/1800
FVH	(80°-90°)	6.1	0.2			G0/10
BL	(0°-30°)	126.6	3.5	B1/500		
BM	(30°-60°)	212.4	5.9	B0/220		
BH	(60°-80°)	92.4	2.5	B0/110		G0/110
BVH	(80°-90°)	1.1	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: P401443

CATALOG NUMBER: ENV-SA1D-727-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	388.6	388.6	388.6	388.6	388.6	388.6	388.6	388.6	388.6	388.6	388.6
2.5°	372.5	372.5	373.9	374.5	376.5	378.6	381.2	381.9	383.2	386.6	387.9
5°	352.4	353.0	354.4	357.7	362.4	367.8	374.5	376.5	381.9	388.6	393.3
7.5°	344.3	345.0	347.0	351.0	357.1	365.1	373.2	375.9	383.2	394.0	400.7
10°	343.0	343.0	345.7	351.7	359.1	369.2	377.9	381.2	391.3	404.1	414.8
12.5°	343.0	343.0	346.3	353.7	362.4	375.2	387.3	392.0	403.4	419.5	432.9
15°	349.0	350.4	352.4	357.1	367.1	381.2	398.0	403.4	417.5	436.9	453.7
17.5°	392.0	390.6	383.9	377.9	375.9	387.9	408.1	415.5	436.3	461.1	479.2
20°	475.2	474.5	462.4	432.9	406.7	400.0	423.5	432.2	462.4	495.3	508.8
22.5°	575.9	579.2	560.4	520.8	467.1	432.9	446.3	458.4	497.4	537.0	545.0
25°	675.9	679.9	662.5	612.8	547.0	487.3	477.9	488.6	532.9	572.5	569.2
27.5°	794.0	790.7	773.2	716.8	640.3	560.4	520.2	522.2	556.4	600.7	590.0
30°	880.6	875.9	859.1	820.9	749.0	657.8	580.6	574.5	584.6	633.6	622.2
32.5°	959.8	963.2	950.4	899.4	831.6	757.8	671.2	655.1	651.1	692.7	673.9
35°	1038.3	1037.7	1033.0	988.0	921.5	851.7	779.3	767.8	766.5	806.8	755.8
37.5°	1132.3	1127.6	1118.9	1073.2	1020.2	953.8	876.6	858.5	855.1	863.1	803.4
40°	1233.0	1239.0	1224.9	1177.3	1119.5	1069.9	961.8	934.3	911.5	935.0	896.7
42.5°	1382.7	1387.3	1362.5	1329.6	1255.1	1208.8	1099.4	1061.8	1051.1	1086.7	1043.7
45°	1570.6	1561.9	1545.1	1522.3	1460.5	1390.0	1275.9	1240.4	1228.9	1290.0	1219.6
47.5°	1716.9	1715.6	1716.2	1711.5	1702.1	1617.6	1482.0	1457.8	1446.4	1534.3	1456.5
50°	1809.5	1814.9	1837.7	1896.1	1939.1	1903.5	1744.4	1714.9	1706.2	1797.4	1692.1
52.5°	1879.3	1892.1	1930.3	2045.8	2183.4	2195.5	2063.9	2022.3	2002.2	2027.7	1881.3
55°	1914.9	1920.9	1979.3	2149.8	2365.3	2451.9	2396.8	2361.9	2280.7	2232.4	2103.5
57.5°	1831.7	1822.3	1923.0	2139.8	2459.2	2658.6	2682.1	2642.5	2512.3	2474.7	2373.3
60°	1613.5	1609.5	1722.9	1983.4	2377.4	2706.9	2893.5	2868.7	2749.2	2659.9	2564.6
62.5°	1231.0	1237.7	1357.8	1622.9	2085.4	2568.0	3011.0	3031.1	2904.2	2771.3	2706.2
64°	988.7	980.6	1090.7	1360.5	1829.7	2382.7	3002.2	3055.3	2951.2	2829.7	2719.0
65°	830.3	812.8	918.2	1162.5	1613.5	2248.5	2940.5	3025.7	2954.6	2843.8	2672.7
67.5°	436.9	446.3	491.3	706.1	1089.3	1700.1	2647.8	2776.7	2805.6	2651.2	2329.0
70°	196.0	197.3	226.2	360.4	602.7	1102.8	2129.7	2338.4	2354.5	2178.0	1687.4
72.5°	65.1	65.8	100.0	144.3	253.0	510.8	1438.4	1628.3	1663.2	1412.2	915.5
75°	40.3	41.6	53.0	77.9	117.5	178.5	728.9	857.8	865.2	626.2	332.9
77.5°	25.5	26.8	32.2	46.3	64.4	67.8	238.9	289.3	327.5	225.5	103.4
80°	16.1	16.1	20.8	28.2	33.6	28.9	65.1	85.9	103.4	75.8	34.9
82.5°	6.0	6.0	10.7	15.4	14.1	10.1	17.5	22.8	39.6	37.6	16.8
85°	0.0	0.0	0.7	1.3	0.7	1.3	3.4	4.7	7.4	10.7	5.4
87.5°	0.0	0.0	0.0	0.0	0.7	0.7	1.3	1.3	1.3	1.3	1.3
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: P401443

CATALOG NUMBER: ENV-SA1D-727-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	388.6	388.6	388.6	388.6	388.6	388.6	388.6	388.6	388.6	388.6	388.6
2.5°	390.0	391.3	394.0	394.7	395.3	393.3	395.3	393.3	394.7	394.7	394.7
5°	396.0	398.0	400.0	400.7	400.0	395.3	396.7	393.3	392.6	392.6	392.6
7.5°	404.1	406.1	409.4	407.4	403.4	396.7	396.0	391.3	389.3	389.3	390.0
10°	418.8	420.8	422.2	418.2	410.1	400.0	392.6	382.6	377.9	375.9	375.9
12.5°	437.6	439.6	439.0	432.2	417.5	396.7	375.9	356.4	342.3	336.9	331.6
15°	457.8	460.4	459.1	445.0	416.8	379.9	339.6	294.0	265.8	247.7	244.3
17.5°	481.2	483.9	477.2	451.7	406.7	344.3	267.8	206.1	165.1	149.7	149.0
20°	510.1	508.8	492.7	452.4	388.6	278.5	179.2	128.9	111.4	107.4	106.7
22.5°	543.0	537.0	507.4	448.4	339.0	189.3	115.4	102.0	100.0	98.7	98.7
25°	561.8	551.0	512.8	436.9	261.1	120.8	98.0	95.3	92.6	89.9	89.3
27.5°	576.6	560.4	514.8	399.4	173.8	92.6	88.6	85.9	81.9	77.9	77.2
30°	603.4	579.2	518.2	333.6	106.7	79.2	77.2	72.5	66.4	62.4	61.1
32.5°	651.7	616.8	531.6	249.7	77.9	69.8	64.4	58.4	51.7	47.7	47.7
35°	703.4	652.4	538.3	164.4	67.8	61.1	53.0	45.6	39.6	36.2	35.6
37.5°	751.1	703.4	536.3	100.7	60.4	52.4	43.6	36.2	30.9	28.2	28.2
40°	848.4	792.7	508.8	69.1	53.0	44.3	35.6	28.2	24.8	22.8	22.8
42.5°	987.3	890.7	447.7	59.1	46.3	36.9	28.2	23.5	20.8	18.8	18.8
45°	1143.0	998.7	357.1	53.0	40.3	30.9	23.5	19.5	16.8	16.1	16.1
47.5°	1347.1	1129.6	262.4	47.7	34.9	26.2	19.5	16.1	14.8	14.1	14.1
50°	1525.6	1235.7	179.2	41.6	30.9	22.1	16.8	14.8	13.4	12.8	12.8
52.5°	1688.0	1309.5	118.1	36.2	27.5	18.1	15.4	13.4	12.8	12.1	12.1
55°	1879.3	1365.9	79.9	31.5	24.2	16.8	14.8	13.4	12.1	12.1	11.4
57.5°	2041.8	1399.4	57.1	26.8	21.5	15.4	14.1	12.8	11.4	10.7	10.7
60°	2136.4	1359.8	41.6	23.5	18.8	14.1	12.8	11.4	10.7	10.1	10.1
62.5°	2162.6	1283.3	32.2	20.1	16.1	12.8	11.4	10.1	9.4	8.7	8.7
64°	2102.2	1201.4	27.5	17.5	14.1	11.4	10.7	9.4	8.1	6.7	6.7
65°	2016.9	1125.6	24.8	16.1	12.8	10.7	10.1	8.7	6.7	5.4	5.4
67.5°	1680.7	897.4	20.1	13.4	10.1	9.4	8.1	6.7	4.7	3.4	3.4
70°	1193.4	627.6	15.4	10.7	8.7	8.7	7.4	5.4	2.7	1.3	1.3
72.5°	631.6	326.2	12.8	8.7	6.7	6.7	6.0	3.4	2.0	1.3	0.7
75°	220.8	107.4	10.7	7.4	6.0	4.7	4.0	2.7	2.0	1.3	0.7
77.5°	67.1	35.6	9.4	7.4	5.4	4.0	4.7	4.0	4.0	2.7	2.0
80°	21.5	12.8	5.4	4.7	5.4	5.4	4.7	4.0	4.7	3.4	2.7
82.5°	8.1	4.7	2.0	2.7	2.7	3.4	3.4	2.7	2.0	0.7	0.0
85°	2.7	2.0	1.3	2.0	2.0	2.0	1.3	1.3	0.7	0.0	0.0
87.5°	1.3	1.3	1.3	1.3	1.3	1.3	0.7	0.7	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)