

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: P401557

Luminaire Tested: **ENV-SA1D-827-U-SL2-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401557  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1D-827-U-SL2-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 80 CRI, 2700K, 800mA LIGHTSQUARE WITH 16 LEDS AND TYPE II SPILL LIGHT  
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3355 lumens  
Efficiency: N/A  
Efficacy: 77.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium - Non-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

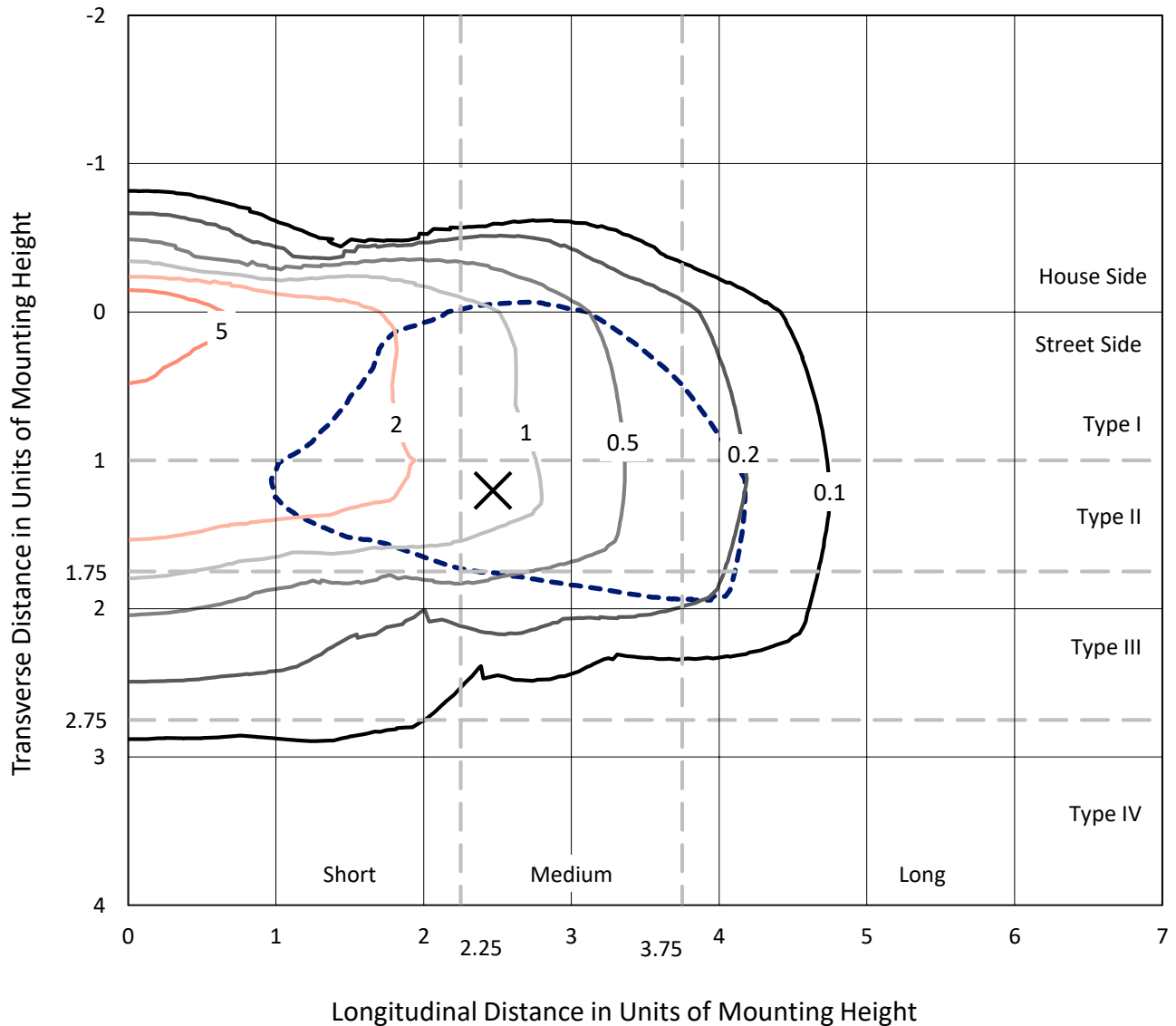


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### Iso-Footcandle Lines of Horizontal Illumination

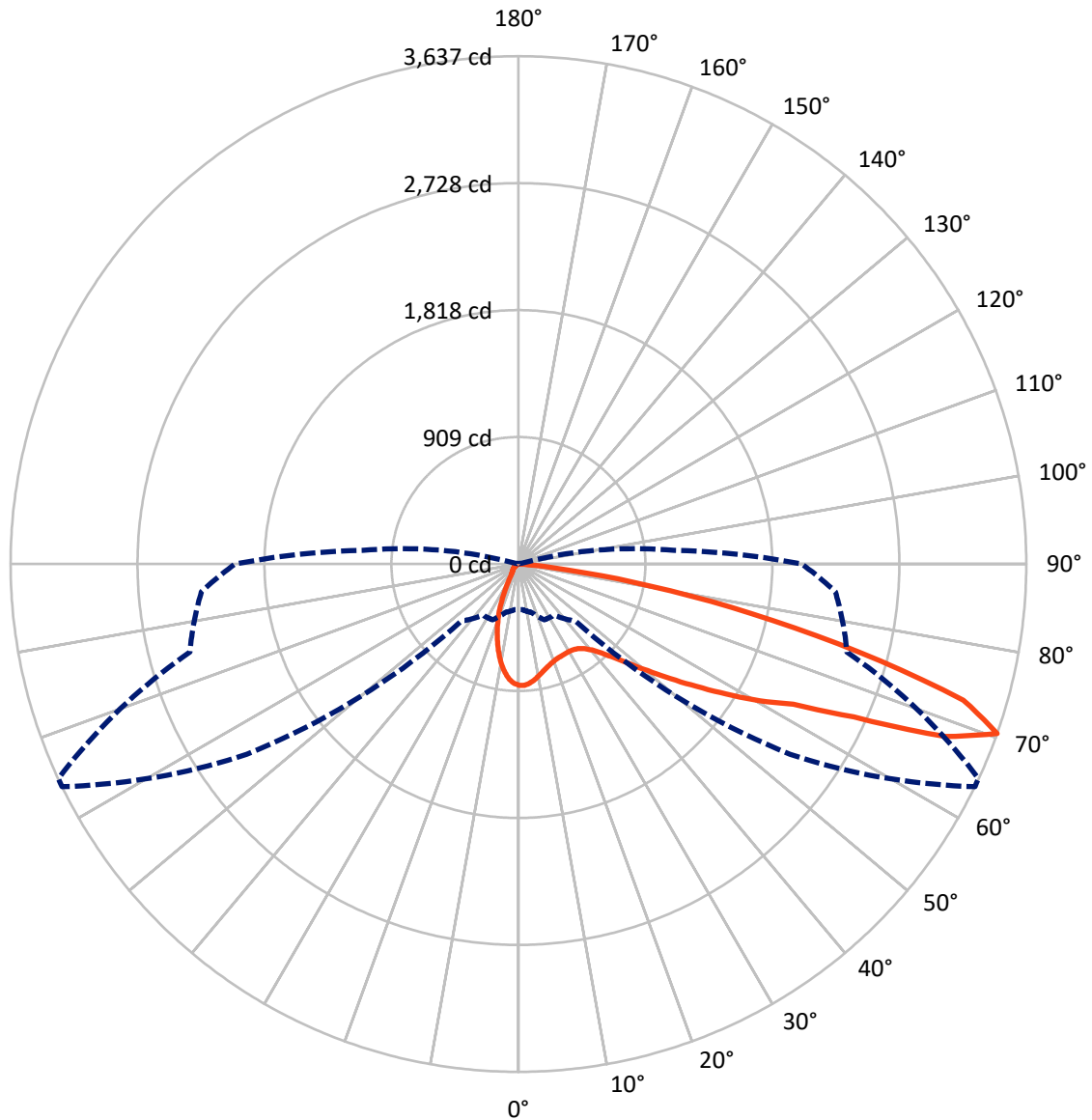
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.7 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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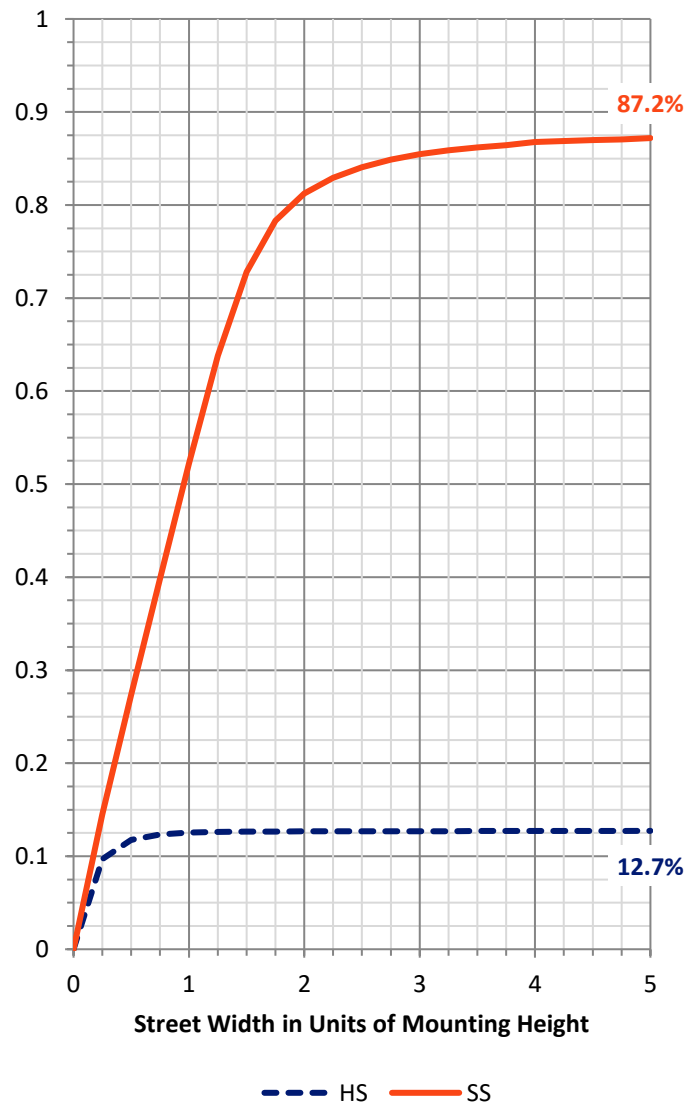
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	431.0	0.0	431.0
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	2924.0	0.0	2924.0
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	3355.0	0.0	3355.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.2	2.2
10°-20°	162.4	4.8
20°-30°	223.7	6.7
30°-40°	308.0	9.2
40°-50°	459.0	13.7
50°-60°	725.2	21.6
60°-70°	821.7	24.5
70°-80°	539.5	16.1
80°-90°	42.3	1.3
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°	3355.0	100.0
0°-180°	3355.0	100.0



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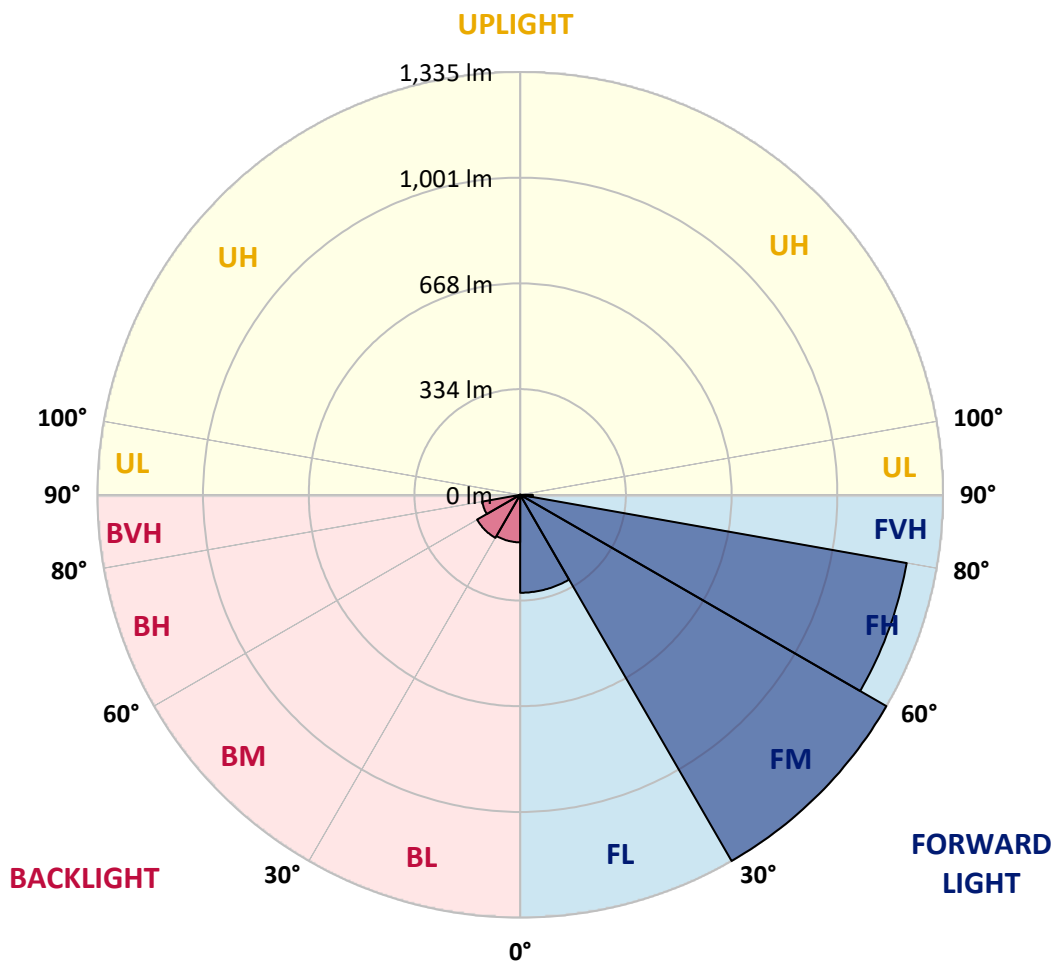
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	309.3	9.2			
FM	(30°-60°)	1335.2	39.8			
FH	(60°-80°)	1239.5	36.9			G1/1800
FVH	(80°-90°)	40.0	1.2			G1/100
BL	(0°-30°)	150.0	4.5	B1/500		
BM	(30°-60°)	157.0	4.7	B0/220		
BH	(60°-80°)	121.7	3.6	B1/500		G1/500
BVH	(80°-90°)	2.4	0.1			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 Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	868.5	868.5	868.5	868.5	868.5	868.5	868.5	868.5	868.5	868.5	868.5
2.5°	844.3	844.3	848.4	852.6	854.9	861.4	866.1	869.7	869.7	872.0	867.9
5°	788.2	788.2	791.8	801.8	812.4	826.0	841.3	856.7	859.6	870.8	870.3
7.5°	736.3	741.0	746.9	757.0	768.2	788.2	809.5	836.0	839.0	866.1	872.0
10°	700.3	703.3	706.8	718.0	734.6	757.6	780.6	811.8	817.2	857.9	872.0
12.5°	671.4	672.0	677.3	689.7	705.6	728.1	754.0	788.2	794.7	843.1	869.7
15°	650.8	650.2	656.1	667.9	683.2	706.2	731.6	767.6	774.7	830.7	869.1
17.5°	638.4	639.0	643.7	652.5	667.3	689.1	715.1	750.5	757.6	820.7	872.0
20°	638.4	638.4	641.3	645.5	656.7	676.1	701.5	738.1	745.2	814.2	876.2
22.5°	650.8	649.6	652.0	648.4	653.7	667.3	693.3	729.8	737.5	811.3	882.6
25°	673.2	670.8	672.6	664.9	659.0	664.9	687.9	726.3	734.6	811.8	888.5
27.5°	704.5	704.5	700.9	690.3	675.6	669.1	687.4	723.9	732.2	811.8	892.7
30°	748.1	746.4	741.0	730.4	707.4	685.6	693.3	723.9	732.2	812.4	893.9
32.5°	791.8	793.0	795.9	785.3	754.0	713.9	707.4	729.2	736.3	811.8	892.1
35°	836.0	836.6	849.6	850.8	810.7	759.3	731.6	743.4	748.1	817.7	893.3
37.5°	875.0	877.9	903.3	915.7	882.6	817.7	770.0	770.0	772.3	833.7	900.3
40°	918.6	926.3	957.0	984.7	971.7	892.7	826.0	808.9	810.1	862.6	916.3
42.5°	969.4	978.8	1018.9	1059.1	1058.5	984.7	896.8	870.8	872.0	912.7	948.7
45°	1033.7	1040.2	1090.9	1141.1	1151.7	1086.2	985.9	951.7	952.9	988.8	1011.9
47.5°	1112.2	1119.8	1168.8	1229.0	1256.1	1208.3	1101.5	1064.4	1060.8	1086.2	1102.7
50°	1214.8	1229.6	1258.5	1316.3	1381.8	1349.9	1237.2	1200.1	1195.3	1215.4	1220.7
52.5°	1312.8	1326.3	1338.1	1391.2	1518.1	1525.7	1403.6	1362.9	1358.2	1362.9	1369.4
55°	1327.5	1335.2	1344.0	1416.0	1628.4	1749.4	1593.0	1544.6	1531.1	1522.2	1544.0
57.5°	1210.1	1205.4	1234.9	1332.8	1646.7	1996.6	1849.1	1755.3	1742.3	1693.3	1671.5
60°	958.2	951.7	979.4	1113.3	1544.0	2119.3	2204.2	1988.3	1956.4	1792.4	1771.2
62.5°	673.2	665.5	701.5	780.6	1197.7	2095.1	2604.9	2209.0	2145.8	1880.3	1851.4
65°	518.6	515.1	534.5	552.2	731.0	1814.8	2825.5	2639.7	2509.3	1975.9	1938.7
67.5°	406.5	411.2	435.4	486.8	472.0	1131.0	2804.9	3296.9	3166.5	2151.7	2128.1
70°	326.9	328.0	358.1	440.1	445.5	575.8	2374.8	3636.8	3635.0	2435.5	2278.6
72.5°	197.7	203.0	251.9	380.6	449.6	440.7	1596.5	3332.3	3378.4	2501.6	2055.0
75°	95.0	100.3	130.4	255.5	446.6	428.9	863.8	2522.8	2581.8	2243.2	1666.2
77.5°	35.4	40.1	60.2	125.1	331.0	392.9	454.3	1701.0	1747.6	1642.0	1128.7
80°	11.2	13.0	23.6	57.2	168.2	324.5	292.6	959.3	990.6	718.6	379.4
82.5°	1.2	1.8	6.5	19.5	64.9	165.2	171.7	361.1	377.0	140.4	76.7
85°	0.0	0.0	0.0	0.0	1.2	1.2	42.5	69.0	56.6	13.6	22.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.6	1.2	1.8	1.8	1.8	2.4
90°	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°	868.5	868.5	868.5	868.5	868.5	868.5	868.5	868.5	868.5	868.5	868.5
2.5°	867.3	867.3	863.2	856.7	848.4	836.6	833.7	824.2	824.2	816.6	815.4
5°	868.5	864.9	851.4	831.3	803.6	773.5	754.6	734.0	716.3	705.1	706.2
7.5°	868.5	860.8	833.7	789.4	737.5	685.6	646.1	600.0	578.8	564.6	571.1
10°	866.1	853.1	805.9	738.7	656.7	584.7	519.8	466.7	430.1	414.8	401.8
12.5°	860.8	841.9	771.1	675.6	570.5	476.1	386.5	316.8	268.5	244.3	241.3
15°	856.1	830.1	730.4	606.5	473.2	349.9	249.6	182.9	141.6	132.2	133.3
17.5°	854.9	818.9	691.5	533.4	378.2	233.1	144.0	116.2	110.3	108.0	107.4
20°	855.5	808.9	649.0	460.8	267.9	145.1	109.2	102.7	100.3	99.1	98.5
22.5°	857.9	797.7	607.1	384.7	182.9	106.2	97.4	93.2	90.3	88.5	87.9
25°	857.9	785.3	560.5	303.9	119.8	93.2	87.3	82.0	77.9	75.5	75.5
27.5°	856.1	771.1	512.1	230.7	95.0	83.2	76.7	69.6	64.3	61.4	61.4
30°	850.8	754.0	465.5	161.1	83.2	74.3	66.1	57.2	50.7	47.8	46.6
32.5°	843.1	735.7	411.8	113.3	74.9	64.9	55.5	46.0	40.1	36.6	36.6
35°	834.9	717.4	354.0	86.7	67.9	57.2	46.6	37.2	31.9	29.5	28.9
37.5°	830.7	698.0	297.4	74.9	60.8	49.0	37.8	30.1	26.0	24.2	23.6
40°	833.7	683.2	241.9	67.3	54.3	41.3	31.3	25.4	21.8	19.5	19.5
42.5°	851.4	675.0	189.4	61.4	48.4	34.8	26.0	20.7	17.1	15.3	15.3
45°	887.4	680.9	144.0	56.1	41.3	28.9	21.8	16.5	13.0	11.2	11.2
47.5°	947.5	704.5	109.2	51.3	35.4	23.6	17.7	13.0	10.0	8.9	8.3
50°	1035.5	751.1	85.6	46.6	29.5	20.1	14.8	10.0	7.7	6.5	6.5
52.5°	1162.3	831.9	73.2	41.3	24.2	16.5	11.8	7.7	5.9	4.7	4.7
55°	1318.1	934.6	66.1	36.6	19.5	13.6	9.4	5.9	4.1	3.5	3.0
57.5°	1444.3	1016.0	62.0	31.9	16.5	11.8	7.1	4.7	3.5	2.4	2.4
60°	1555.8	1068.5	54.9	26.6	14.2	9.4	5.9	3.5	2.4	1.8	1.8
62.5°	1646.1	1102.7	45.4	21.2	11.8	7.7	4.7	3.0	2.4	1.8	1.8
65°	1748.8	1130.4	37.2	16.5	10.0	6.5	4.1	2.4	1.8	1.8	1.8
67.5°	1950.0	1192.4	27.7	13.0	7.7	5.3	3.5	2.4	1.8	1.2	1.2
70°	2028.4	1119.8	21.8	10.6	5.9	4.7	3.5	2.4	1.2	1.2	1.2
72.5°	1726.3	838.4	17.1	8.9	5.3	4.1	3.5	2.4	1.8	1.8	1.2
75°	1369.4	566.4	13.6	7.1	5.3	4.7	3.5	3.5	3.0	2.4	2.4
77.5°	874.4	250.8	10.6	5.9	5.3	5.9	5.3	3.5	3.5	3.0	3.0
80°	260.8	60.2	7.7	4.7	4.1	4.7	5.3	3.5	2.4	1.8	1.8
82.5°	56.6	14.2	4.7	2.4	3.0	2.4	3.5	3.5	2.4	1.8	1.8
85°	18.9	5.3	3.0	2.4	1.8	1.8	1.8	1.8	1.8	1.8	1.2
87.5°	1.2	1.8	1.8	1.2	1.2	1.2	1.2	0.6	0.6	1.2	1.2
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)