

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: P401801

Luminaire Tested: **ENT-SA1F-727-U-T2-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401801
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-SA1F-727-U-T2-HSS
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 2700K, 1200mA 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: 4927 lumens
Efficiency: N/A
Efficacy: 74.5 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): 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

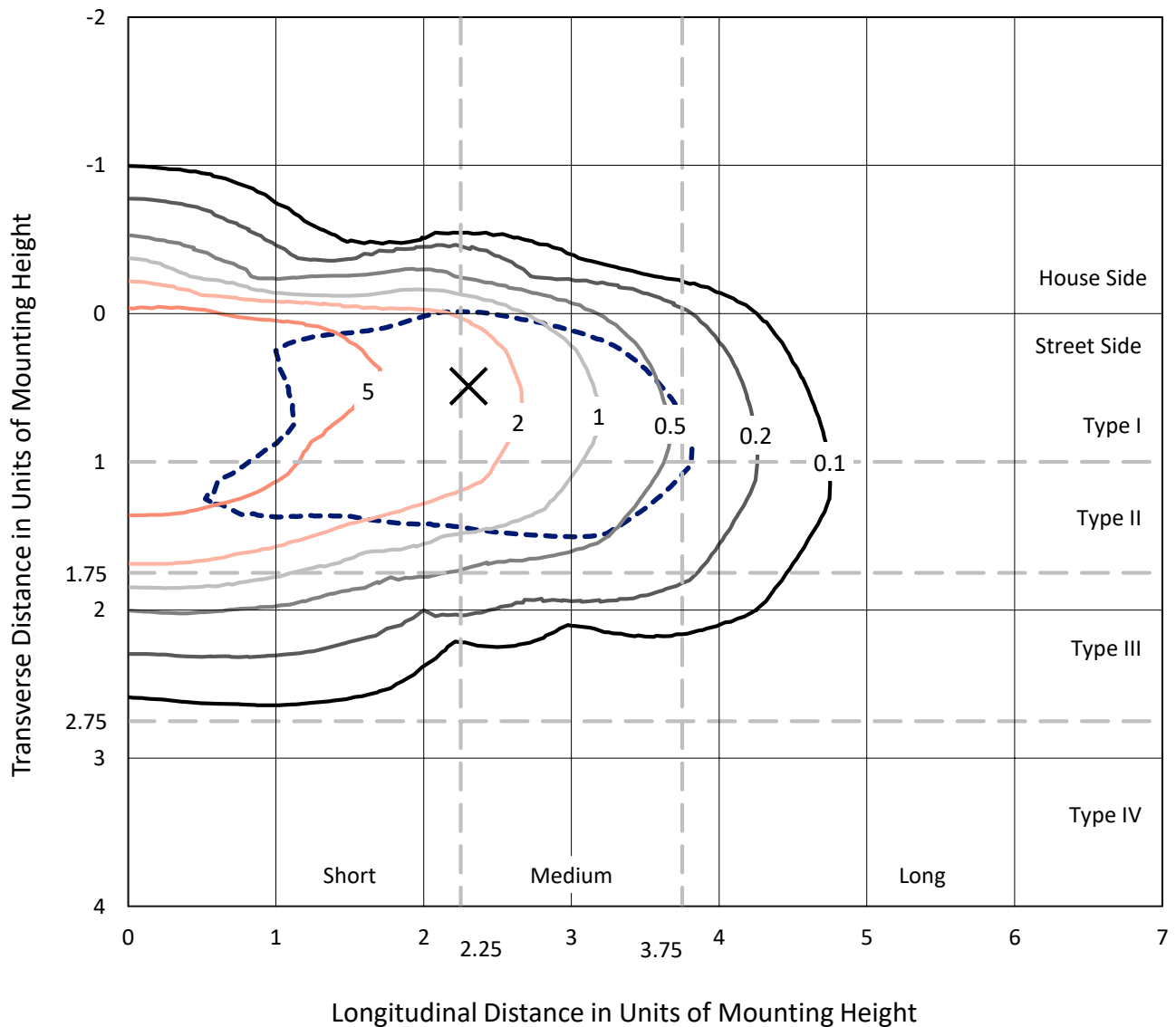


REPORT NUMBER: P401801

CATALOG NUMBER: ENT-SA1F-727-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

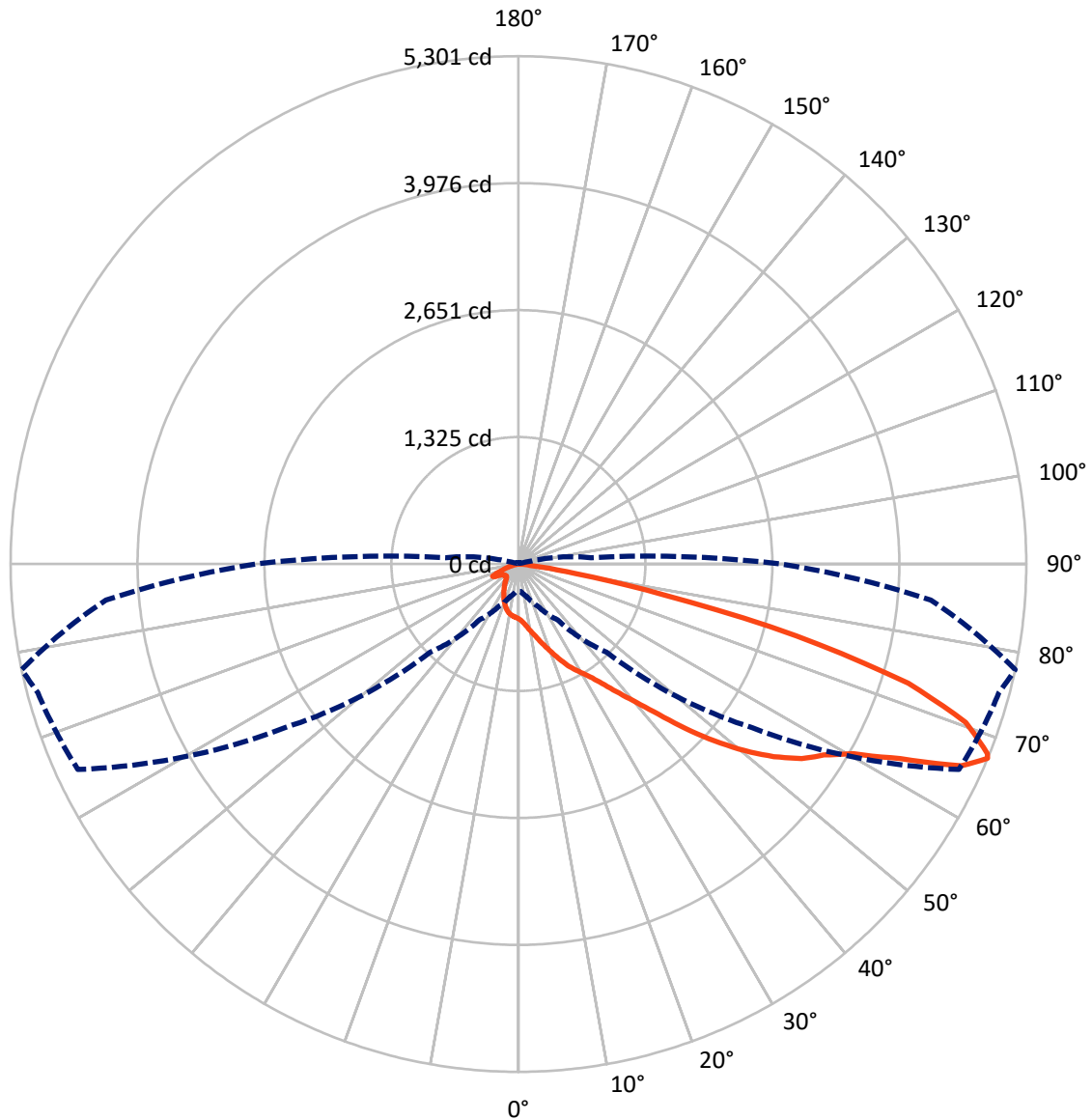


Based on 10 foot mounting height. Maximum calculated value = 8.9 fc
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P401801

CATALOG NUMBER: ENT-SA1F-727-U-T2-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P401801

CATALOG NUMBER: ENT-SA1F-727-U-T2-HSS

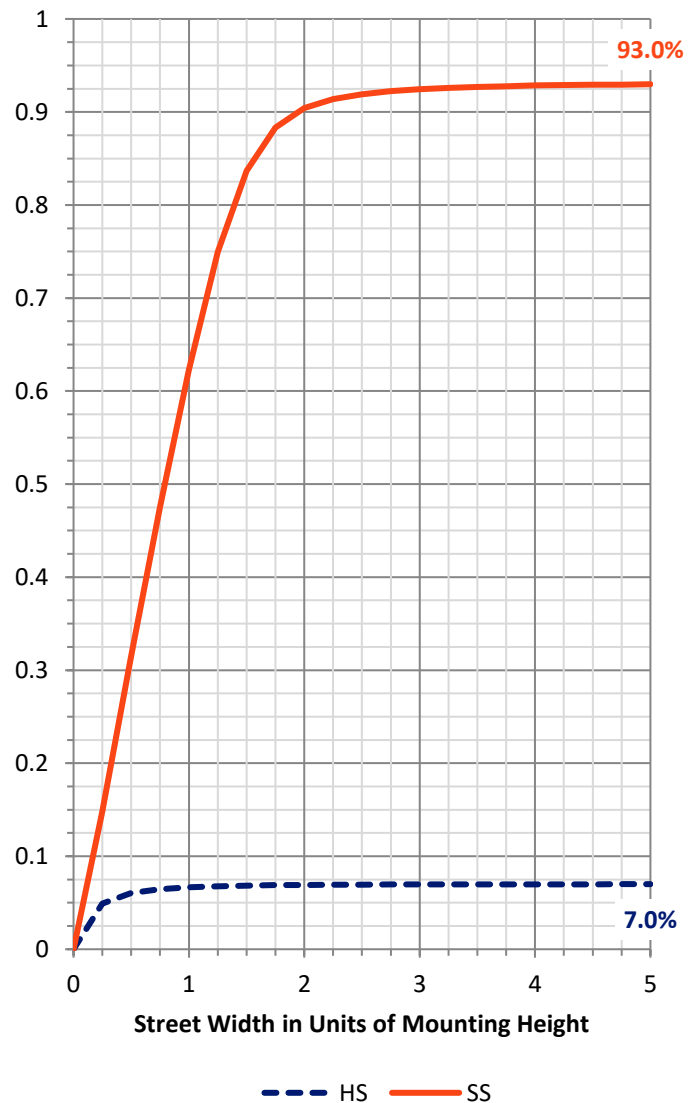
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	347.6	0.0	347.6
	% Fixture	7.1	0.0	7.1
Street Side	Lumens	4579.4	0.0	4579.4
	% Fixture	92.9	0.0	92.9
Total	Lumens	4927.0	0.0	4927.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.1	1.1
10°-20°	158.0	3.2
20°-30°	279.0	5.7
30°-40°	492.0	10.0
40°-50°	845.6	17.2
50°-60°	1272.9	25.8
60°-70°	1252.7	25.4
70°-80°	547.4	11.1
80°-90°	24.3	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°	4927.0	100.0
0°-180°	4927.0	100.0



REPORT NUMBER: P401801

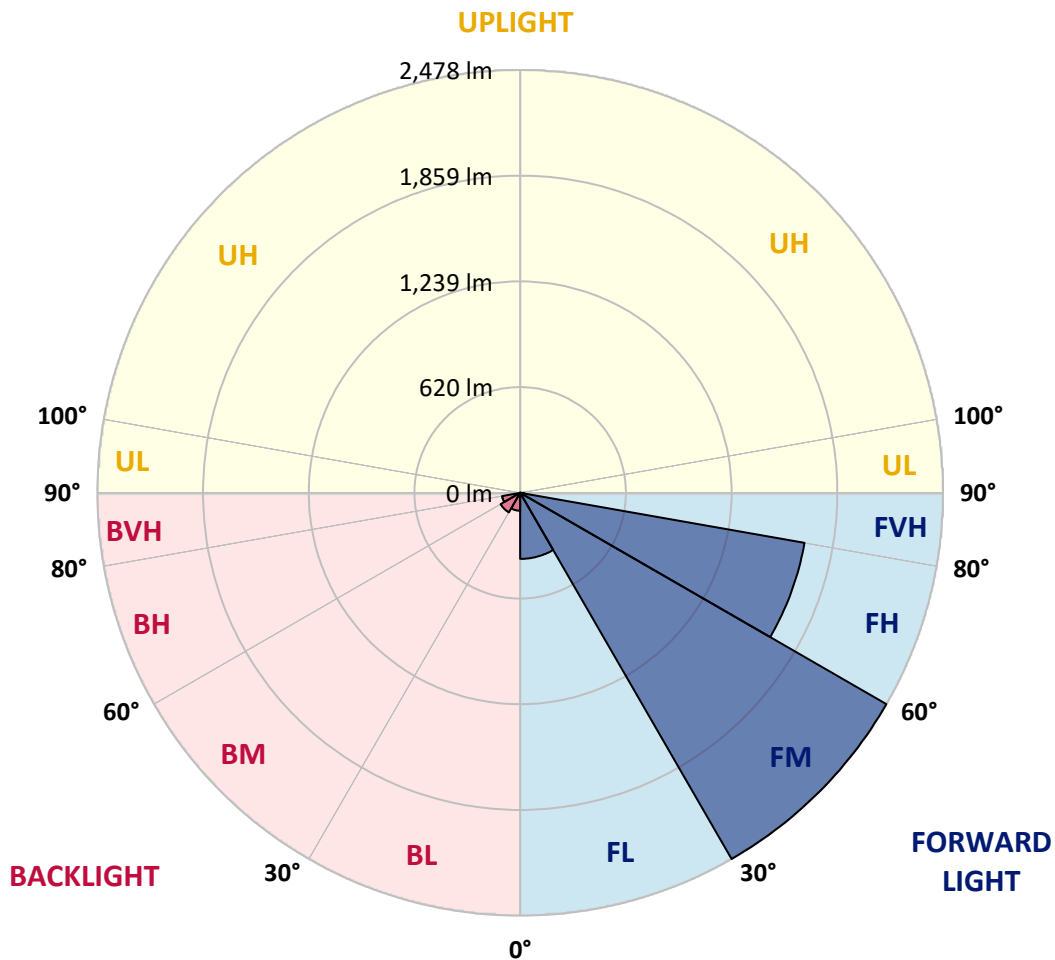
CATALOG NUMBER: ENT-SA1F-727-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	387.1	7.9			
FM	(30°-60°)	2478.3	50.3			
FH	(60°-80°)	1692.2	34.3			G1/1800
FVH	(80°-90°)	21.8	0.4			G1/100
BL	(0°-30°)	105.0	2.1	B0/110		
BM	(30°-60°)	132.3	2.7	B0/220		
BH	(60°-80°)	107.8	2.2	B0/110		G0/110
BVH	(80°-90°)	2.5	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: P401801

CATALOG NUMBER: ENT-SA1F-727-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	572.1	572.1	572.1	572.1	572.1	572.1	572.1	572.1	572.1	572.1	572.1
2.5°	656.3	659.1	655.4	652.6	645.2	635.9	626.7	612.8	598.0	592.4	583.2
5°	736.8	736.8	736.8	729.4	722.9	705.3	684.1	662.8	635.0	624.8	603.5
7.5°	779.4	780.3	783.1	783.1	779.4	767.4	744.2	720.2	678.5	664.6	630.4
10°	784.0	787.7	795.1	806.2	814.6	821.1	807.2	781.3	731.3	714.6	664.6
12.5°	772.0	773.8	785.9	806.2	833.1	859.9	860.9	845.1	789.6	766.4	706.3
15°	744.2	747.0	764.6	797.0	838.6	886.8	914.5	909.9	858.1	831.2	752.6
17.5°	699.8	702.6	724.8	772.9	834.0	904.4	963.6	986.7	925.7	899.7	799.8
20°	697.9	698.9	707.2	743.3	815.5	914.5	1011.7	1066.4	1008.0	980.3	855.3
22.5°	816.4	809.0	790.5	767.4	798.8	911.8	1055.2	1150.6	1109.9	1066.4	919.2
25°	948.8	951.6	931.2	876.6	836.8	907.1	1088.6	1245.9	1205.2	1161.7	984.9
27.5°	1087.6	1083.0	1065.4	1015.4	948.8	940.5	1112.6	1322.8	1296.8	1244.1	1043.2
30°	1222.8	1219.1	1206.1	1155.2	1083.0	1026.5	1131.1	1392.2	1383.8	1325.5	1090.4
32.5°	1377.4	1383.8	1367.2	1300.5	1212.6	1143.2	1170.9	1465.3	1489.4	1418.1	1139.5
35°	1556.9	1556.9	1522.7	1461.6	1370.9	1273.7	1250.6	1545.8	1623.6	1546.8	1217.2
37.5°	1705.1	1717.1	1696.7	1608.8	1523.6	1421.8	1371.8	1644.9	1789.3	1711.5	1321.8
40°	1821.7	1842.0	1843.0	1756.0	1677.3	1610.6	1541.2	1784.7	1997.6	1897.6	1446.8
42.5°	1930.0	1933.7	1949.4	1899.4	1820.8	1803.2	1731.9	1950.3	2257.7	2140.1	1613.4
45°	2067.9	2075.3	2066.1	2029.0	1961.5	1984.6	1944.8	2160.5	2550.2	2451.1	1809.6
47.5°	2270.6	2288.2	2274.3	2207.7	2125.3	2168.8	2140.1	2369.7	2880.6	2760.3	2022.5
50°	2460.4	2474.3	2489.1	2467.8	2385.4	2343.8	2308.6	2590.9	3163.9	3062.1	2231.7
52.5°	2480.7	2493.7	2575.2	2650.1	2704.8	2595.5	2485.4	2814.9	3425.8	3340.7	2423.4
55°	2348.4	2356.7	2492.8	2640.9	2891.7	2928.8	2745.5	3036.1	3645.2	3586.9	2552.0
57.5°	1980.0	2015.1	2208.6	2435.4	2845.5	3126.9	3114.8	3293.5	3787.8	3760.9	2717.7
60°	1300.5	1339.4	1570.8	1914.2	2504.8	3074.1	3520.3	3679.5	3987.7	4017.3	3008.4
62.5°	673.9	719.2	922.9	1227.4	1815.2	2677.0	3658.2	4313.5	4370.9	4471.8	3526.7
65°	385.1	394.3	496.1	719.2	1123.7	1917.0	3492.5	4941.1	4875.4	5080.0	4188.6
67°	286.0	286.0	357.3	488.7	711.8	1303.3	2978.7	5073.5	5192.9	5301.2	4321.9
67.5°	256.4	270.3	331.4	450.8	638.7	1156.1	2787.1	5038.3	5213.3	5280.8	4275.6
70°	175.9	185.1	237.9	323.1	430.4	601.7	1827.2	4456.1	5022.6	4954.1	3874.8
72.5°	105.5	109.2	157.4	232.3	321.2	322.1	996.9	3382.3	4256.1	4255.2	3164.8
75°	65.7	69.4	92.6	155.5	224.9	201.8	461.0	2301.2	3056.5	2997.3	2120.7
77.5°	37.0	42.6	55.5	85.2	142.6	128.7	194.4	1289.4	1651.4	1549.5	1053.4
80°	14.8	17.6	31.5	40.7	80.5	76.8	79.6	453.6	668.3	602.6	352.7
82.5°	3.7	4.6	11.1	19.4	31.5	31.5	25.0	124.0	158.3	147.2	90.7
85°	0.0	0.0	0.9	0.9	0.9	1.9	6.5	13.9	16.7	19.4	14.8
87.5°	0.0	0.0	0.0	0.9	0.9	0.9	1.9	2.8	2.8	2.8	2.8
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: P401801

CATALOG NUMBER: ENT-SA1F-727-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	572.1	572.1	572.1	572.1	572.1	572.1	572.1	572.1	572.1	572.1	572.1
2.5°	575.8	569.3	556.3	542.4	528.5	517.4	508.2	495.2	493.4	493.4	493.4
5°	587.8	573.0	543.4	513.7	484.1	457.3	437.8	422.1	408.2	403.6	407.3
7.5°	605.4	578.5	526.7	474.9	428.6	390.6	362.9	340.6	330.5	324.9	320.3
10°	628.5	586.9	504.5	428.6	370.3	324.9	295.3	274.0	263.8	257.3	258.3
12.5°	653.5	593.3	476.7	378.6	313.8	272.1	247.1	229.6	212.9	202.7	205.5
15°	678.5	598.0	442.5	332.3	270.3	233.3	198.1	166.6	155.5	153.7	152.7
17.5°	706.3	597.0	404.5	288.8	233.3	181.4	146.3	142.6	141.6	141.6	140.7
20°	735.0	592.4	361.0	252.7	196.2	137.9	132.4	130.5	127.7	126.8	125.9
22.5°	766.4	584.1	321.2	221.2	146.3	125.9	118.5	112.9	108.3	105.5	106.4
25°	795.1	568.4	282.3	191.6	125.0	112.9	102.7	94.4	89.8	86.1	87.0
27.5°	814.6	540.6	249.0	154.6	114.8	100.0	87.9	79.6	73.1	70.3	70.3
30°	816.4	500.8	219.4	126.8	104.6	87.9	75.0	65.7	62.0	60.2	59.2
32.5°	814.6	460.0	197.2	116.6	95.3	76.8	63.9	57.4	53.7	51.8	51.8
35°	823.8	418.4	176.8	107.4	85.2	67.6	56.5	50.0	47.2	45.4	45.4
37.5°	851.6	389.7	155.5	98.1	75.9	59.2	50.9	45.4	42.6	40.7	40.7
40°	889.6	365.6	129.6	88.9	66.6	53.7	46.3	41.7	38.0	36.1	36.1
42.5°	956.2	356.4	108.3	79.6	58.3	48.1	42.6	37.0	33.3	31.5	31.5
45°	1055.2	361.0	99.0	71.3	52.8	43.5	38.0	32.4	28.7	27.8	27.8
47.5°	1164.5	380.4	92.6	63.9	48.1	40.7	34.2	28.7	25.0	24.1	24.1
50°	1286.7	411.0	87.0	56.5	43.5	37.0	30.5	25.0	22.2	21.3	21.3
52.5°	1403.3	449.9	81.5	50.9	40.7	33.3	26.8	22.2	20.4	19.4	19.4
55°	1492.2	474.9	76.8	47.2	38.0	30.5	24.1	21.3	18.5	17.6	17.6
57.5°	1616.2	516.5	71.3	42.6	34.2	27.8	22.2	19.4	16.7	16.7	16.7
60°	1868.0	628.5	62.9	38.9	30.5	25.0	21.3	17.6	15.7	14.8	14.8
62.5°	2321.5	813.6	54.6	36.1	26.8	22.2	18.5	15.7	13.9	12.0	12.0
65°	2758.4	890.5	46.3	31.5	24.1	19.4	16.7	13.9	10.2	8.3	8.3
67°	2734.4	761.8	38.9	26.8	20.4	17.6	13.9	11.1	7.4	4.6	4.6
67.5°	2669.6	709.0	38.0	25.9	19.4	16.7	13.9	10.2	6.5	3.7	3.7
70°	2268.8	496.1	29.6	20.4	16.7	14.8	11.1	7.4	3.7	1.9	1.9
72.5°	1843.0	393.4	23.1	16.7	13.9	11.1	9.3	4.6	2.8	0.9	0.9
75°	1303.3	241.6	20.4	14.8	11.1	8.3	7.4	4.6	2.8	1.9	0.9
77.5°	643.3	111.1	16.7	13.0	10.2	8.3	6.5	5.6	4.6	3.7	1.9
80°	188.8	36.1	11.1	9.3	9.3	8.3	7.4	6.5	5.6	4.6	2.8
82.5°	42.6	13.0	3.7	4.6	6.5	6.5	6.5	4.6	3.7	1.9	0.9
85°	5.6	2.8	2.8	2.8	3.7	3.7	2.8	1.9	1.9	0.0	0.0
87.5°	1.9	1.9	1.9	2.8	2.8	2.8	1.9	0.9	0.9	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)