

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: P401202

Luminaire Tested: **ENT-SA1B-827-U-SL4**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401202
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-5)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1B-827-U-SL4
Description: ENTRI LED LUMINAIRE
(1) 80 CRI, 2700K, 450mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2389 lumens
Efficiency: N/A
Efficacy: 94.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B0 - U0 - G1

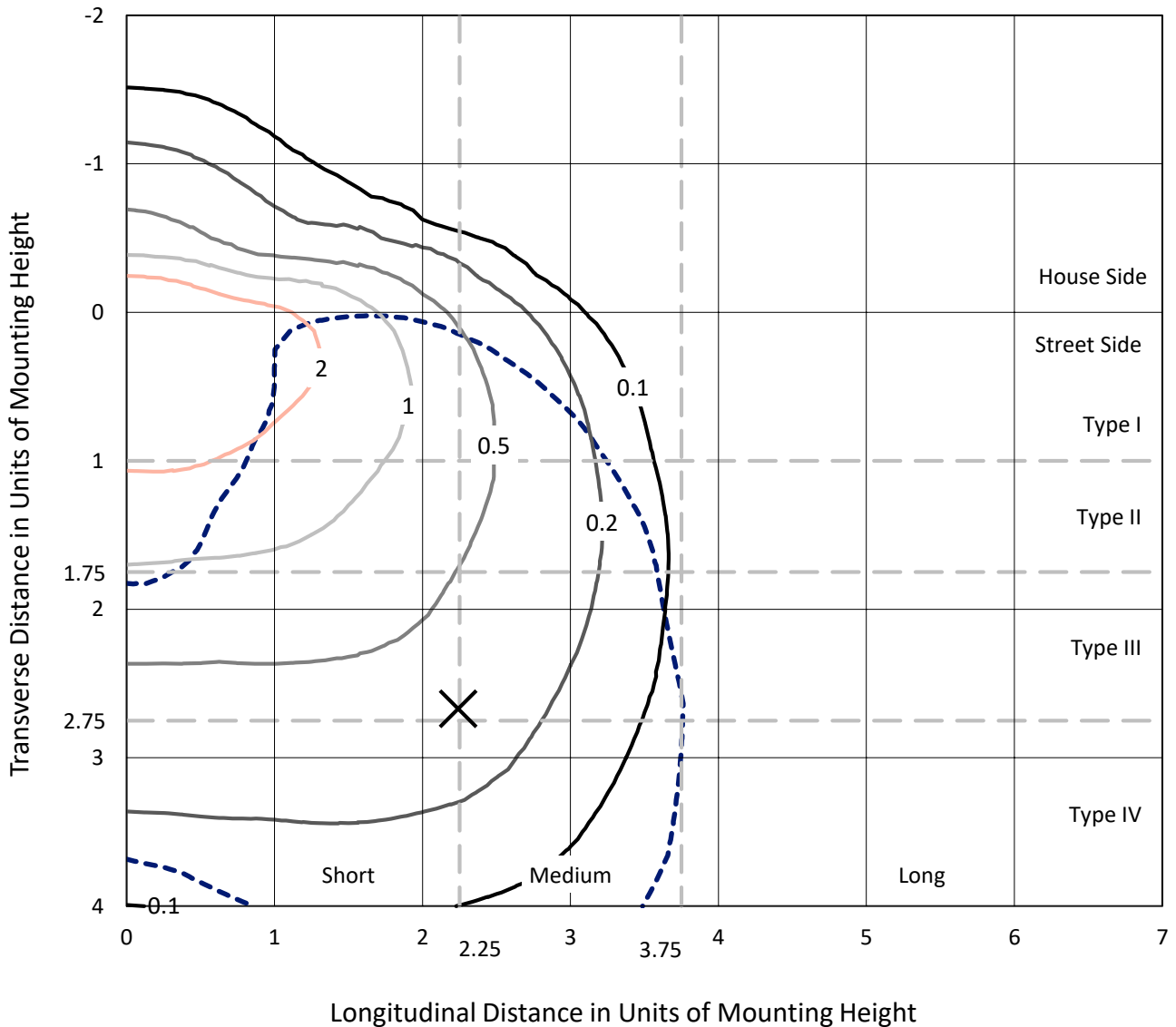
Input Watts (W): 25.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P401202
 CATALOG NUMBER: ENT-SA1B-827-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

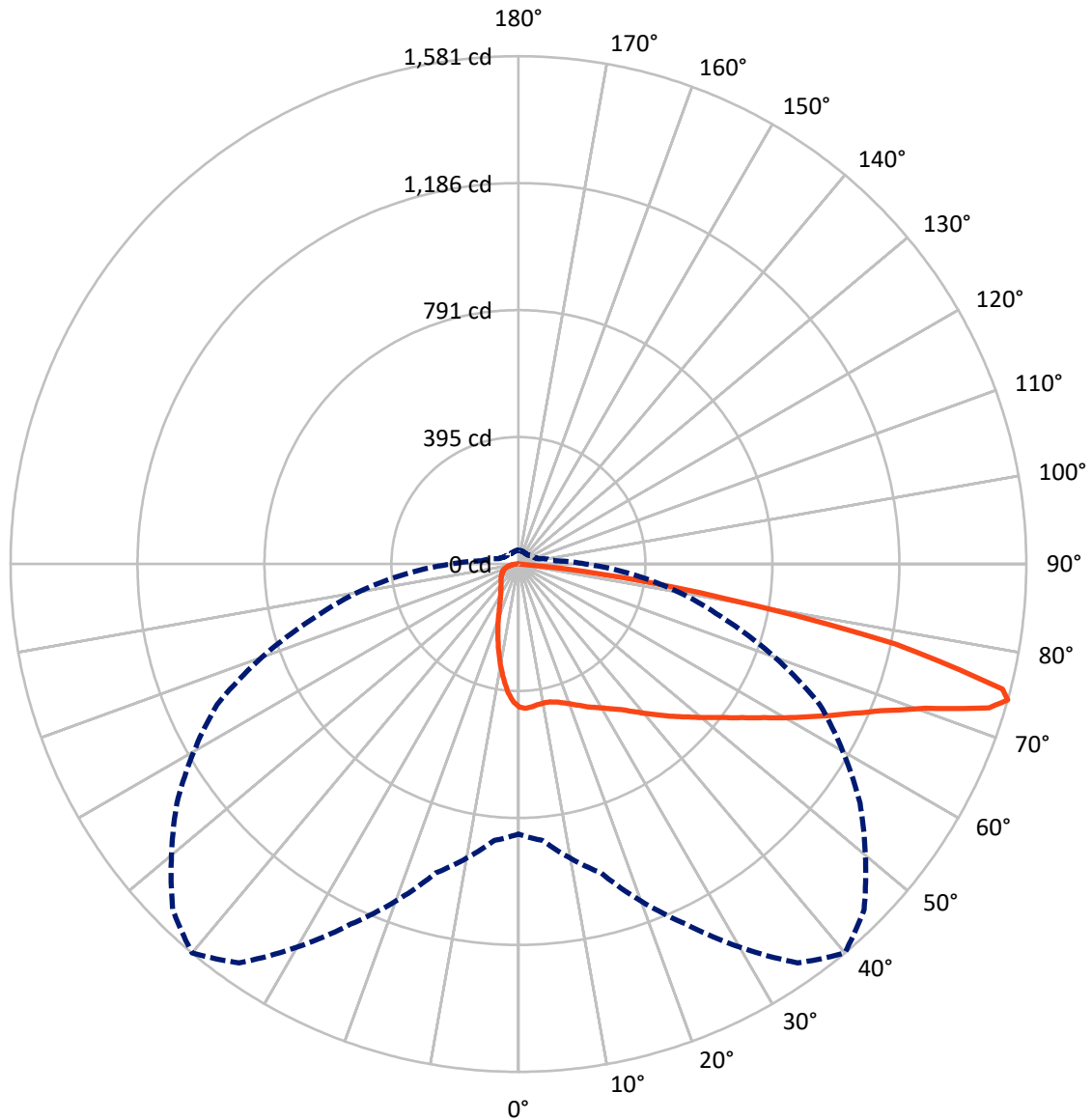


Based on 10 foot mounting height. Maximum calculated value = 4.5 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P401202

CATALOG NUMBER: ENT-SA1B-827-U-SL4

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 74-Deg Vertical

REPORT NUMBER: P401202

CATALOG NUMBER: ENT-SA1B-827-U-SL4

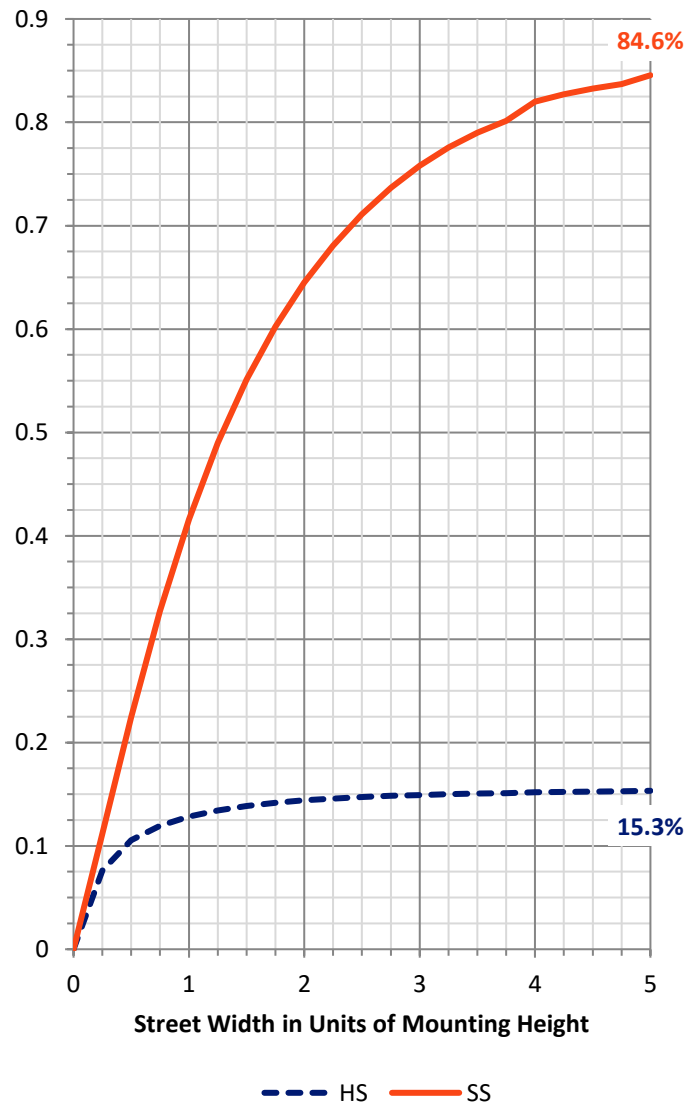
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	372.5	0.0	372.5
	% Fixture	15.6	0.0	15.6
Street Side	Lumens	2016.5	0.0	2016.5
	% Fixture	84.4	0.0	84.4
Total	Lumens	2389.0	0.0	2389.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.4	1.6
10°-20°	101.4	4.2
20°-30°	155.5	6.5
30°-40°	224.6	9.4
40°-50°	323.1	13.5
50°-60°	446.1	18.7
60°-70°	562.4	23.5
70°-80°	487.7	20.4
80°-90°	48.8	2.0
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°	2389.0	100.0
0°-180°	2389.0	100.0



REPORT NUMBER: P401202

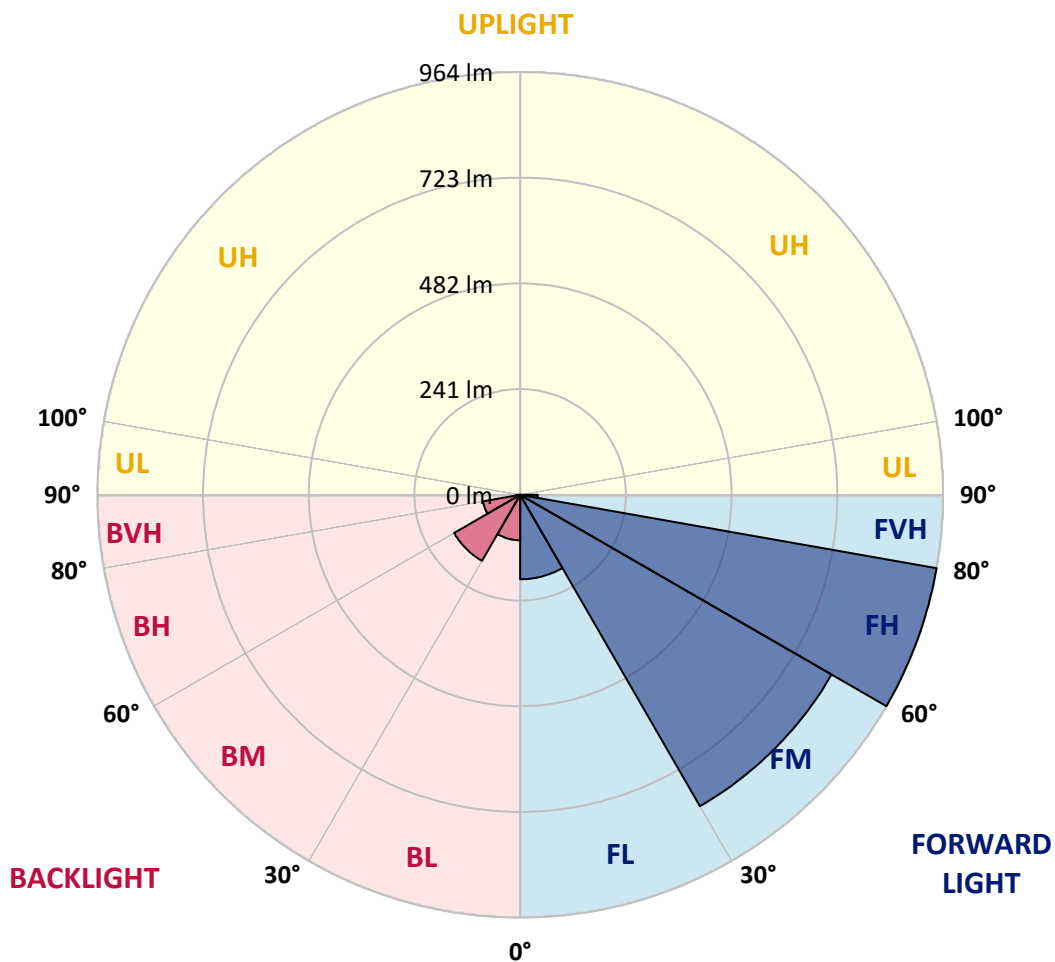
CATALOG NUMBER: ENT-SA1B-827-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	192.6	8.1			
FM (30°-60°)	819.8	34.3			
FH (60°-80°)	964.2	40.4			G1/1800
FVH (80°-90°)	39.9	1.7			G1/100
BL (0°-30°)	103.7	4.3	B0/110		
BM (30°-60°)	174.0	7.3	B0/220		
BH (60°-80°)	86.0	3.6	B0/110		G0/110
BVH (80°-90°)	8.9	0.4			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 IV Short





REPORT NUMBER: P401202

CATALOG NUMBER: ENT-SA1B-827-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	445.9	445.9	445.9	445.9	445.9	445.9	445.9	445.9	445.9	445.9	445.9
2.5°	451.7	451.3	452.4	451.7	450.6	449.9	449.5	447.4	446.7	444.5	441.6
5°	449.9	449.9	449.9	449.2	447.0	446.3	445.6	442.4	440.2	436.6	431.3
7.5°	443.8	444.9	444.5	444.1	442.4	441.6	440.6	436.6	433.8	428.4	421.6
10°	438.1	438.1	438.4	439.8	439.1	439.5	439.1	434.8	430.9	424.1	415.5
12.5°	429.8	431.3	433.4	437.3	439.1	440.6	440.6	437.3	433.0	424.8	414.8
15°	424.8	426.6	432.0	439.1	443.4	445.9	446.7	442.7	437.3	429.1	418.0
17.5°	422.7	424.8	434.8	444.9	452.4	454.5	454.9	450.6	444.9	434.8	421.9
20°	424.8	427.3	440.6	454.2	463.1	464.9	465.6	459.5	452.4	442.7	425.9
22.5°	433.0	436.6	451.3	466.0	475.3	477.8	477.1	468.5	461.3	451.0	430.9
25°	451.0	453.1	466.4	482.1	489.3	492.1	490.4	480.7	471.4	461.0	438.1
27.5°	471.7	474.6	488.6	500.4	505.0	505.8	504.0	493.9	483.5	475.0	449.2
30°	496.8	499.3	510.8	519.7	520.1	520.4	519.4	507.9	499.3	492.5	465.3
32.5°	523.3	523.7	535.5	539.8	536.9	538.0	536.9	524.4	518.3	516.1	486.4
35°	547.7	548.0	560.2	561.6	557.0	557.3	559.5	544.8	544.8	549.8	517.9
37.5°	570.9	572.0	582.8	581.3	579.5	582.8	585.6	573.1	580.3	594.6	556.3
40°	588.5	591.0	605.3	604.6	608.6	611.8	614.3	607.8	619.3	647.2	603.5
42.5°	600.0	605.0	625.4	630.4	637.2	642.9	647.2	646.9	666.9	705.6	653.7
45°	611.8	616.8	644.0	656.2	667.7	676.6	684.8	689.1	721.0	767.2	712.1
47.5°	626.1	630.4	660.8	684.8	699.5	711.7	726.4	735.7	776.2	829.9	766.2
50°	648.0	650.8	678.0	715.3	733.9	750.8	769.0	788.0	835.6	894.0	813.4
52.5°	676.2	678.0	698.1	746.1	775.8	793.7	821.0	846.0	896.2	952.1	852.1
55°	708.5	707.1	722.5	783.0	817.7	844.6	878.3	903.7	959.9	1002.6	882.9
57.5°	740.7	739.6	751.8	818.4	870.7	902.3	937.0	963.9	1018.3	1049.8	905.1
60°	771.5	767.6	784.8	860.0	934.9	971.0	1002.2	1026.9	1073.5	1083.9	916.9
62.5°	798.7	798.7	823.8	911.2	1011.5	1044.1	1068.8	1085.3	1126.1	1108.9	912.3
65°	823.8	827.0	862.9	968.5	1091.0	1124.3	1145.8	1152.3	1178.4	1110.0	872.9
67.5°	852.1	857.1	907.6	1035.5	1182.7	1218.2	1236.8	1234.7	1215.7	1093.5	788.4
70°	879.7	887.9	963.2	1121.8	1295.9	1343.9	1364.3	1322.1	1235.0	1002.2	654.8
72.5°	899.8	913.7	1008.6	1208.2	1458.2	1531.9	1523.7	1346.1	1144.4	826.0	495.4
74°	841.0	864.3	996.1	1237.9	1516.5	1581.4	1522.3	1298.4	1035.1	665.1	351.0
75°	772.6	795.2	932.7	1226.1	1527.7	1556.7	1448.5	1214.6	928.4	515.4	229.2
77.5°	572.0	589.6	716.4	966.7	1208.2	1199.6	1078.5	823.1	457.4	155.5	96.7
80°	252.5	265.8	353.5	486.4	654.4	651.9	607.1	378.2	147.6	81.3	59.1
82.5°	76.3	75.9	101.7	141.8	248.6	253.2	215.3	130.4	70.6	33.7	28.7
85°	0.4	0.4	0.4	0.4	1.1	9.3	7.9	25.1	12.9	6.1	10.4
87.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	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



REPORT NUMBER: P401202

CATALOG NUMBER: ENT-SA1B-827-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	445.9	445.9	445.9	445.9	445.9	445.9	445.9	445.9	445.9	445.9	445.9
2.5°	439.8	439.5	438.4	435.9	434.1	428.7	430.5	427.0	426.6	425.9	425.5
5°	428.7	427.3	423.0	418.0	412.3	403.3	400.4	395.1	391.9	390.8	391.5
7.5°	417.3	414.1	405.8	395.1	383.6	370.4	360.7	353.2	347.8	346.0	343.5
10°	410.1	404.7	390.8	372.9	354.2	335.6	319.5	308.4	300.2	293.7	293.7
12.5°	407.6	400.4	380.0	353.9	327.0	300.5	277.2	262.5	248.6	241.8	240.7
15°	409.0	399.0	371.1	336.7	300.9	266.5	237.8	216.7	203.4	195.2	198.1
17.5°	410.5	397.9	361.8	318.4	275.4	235.7	202.4	178.4	162.3	158.0	156.2
20°	412.3	395.8	349.9	298.7	249.3	206.0	170.9	146.5	134.3	128.9	128.9
22.5°	414.8	392.9	337.8	276.9	222.4	176.9	144.3	126.1	116.4	113.2	113.2
25°	418.4	391.1	325.2	255.0	197.0	154.0	126.8	112.5	107.5	105.3	104.9
27.5°	425.2	391.5	313.1	232.8	171.9	134.7	114.3	104.9	101.0	99.9	99.6
30°	435.6	395.1	300.2	209.2	149.7	120.0	105.7	99.2	96.7	96.0	96.0
32.5°	449.9	401.5	289.4	188.0	133.2	108.2	98.5	94.2	92.8	92.1	92.4
35°	472.1	412.6	276.5	168.7	117.8	99.9	92.8	89.5	88.5	88.5	88.8
37.5°	501.1	429.8	264.0	150.8	107.5	92.8	87.4	85.6	84.5	85.2	85.6
40°	537.6	450.2	252.2	134.7	98.9	87.0	82.7	81.3	80.9	81.7	82.4
42.5°	577.0	475.0	241.4	121.4	92.1	82.4	78.8	78.1	77.7	78.1	79.2
45°	622.9	503.2	232.5	111.4	87.0	78.4	75.2	74.5	74.1	74.9	75.6
47.5°	665.1	528.7	225.3	104.6	82.7	75.6	72.4	71.3	71.3	71.3	72.0
50°	699.5	548.7	221.0	99.9	79.2	72.4	69.5	68.4	68.1	67.7	68.1
52.5°	729.3	563.8	219.6	97.1	76.3	69.5	66.6	65.9	65.2	64.5	64.8
55°	749.0	571.3	216.7	94.6	73.8	66.3	63.8	63.0	62.3	61.2	61.2
57.5°	760.4	570.6	210.3	93.1	72.4	63.4	60.9	60.9	60.2	58.4	58.7
60°	761.5	558.0	194.5	91.3	71.3	60.5	57.7	58.4	58.4	57.0	57.0
62.5°	743.2	525.1	164.0	86.7	69.8	58.4	55.2	57.0	57.7	56.2	56.2
65°	687.0	447.4	131.8	79.9	66.3	55.9	52.3	55.9	58.0	57.0	56.6
67.5°	579.2	354.2	108.9	72.4	62.3	52.7	49.4	54.1	57.0	57.0	56.6
70°	464.9	269.0	89.5	64.1	56.2	48.7	46.2	50.1	52.7	53.4	53.4
72.5°	320.2	164.4	72.7	55.2	49.4	44.1	41.9	44.4	45.8	47.3	46.9
74°	206.7	115.3	63.8	50.1	45.1	40.5	39.4	40.5	41.2	42.6	43.0
75°	138.3	94.2	59.5	46.6	42.6	38.0	37.3	38.3	39.0	40.1	40.1
77.5°	79.5	67.3	48.0	38.7	35.5	32.6	32.2	32.6	33.7	34.7	34.4
80°	55.2	51.2	38.0	30.1	27.9	26.5	26.9	27.2	29.0	29.4	29.0
82.5°	33.3	36.9	26.9	22.6	21.1	20.8	21.8	22.6	24.0	24.4	24.0
85°	13.3	17.6	13.3	12.5	14.0	15.4	17.2	18.3	19.0	19.0	19.0
87.5°	0.0	2.5	3.2	5.0	7.9	9.3	12.2	13.3	14.0	13.6	13.3
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)