

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: P401084

Luminaire Tested: **ENT-SA1B-727-U-T3**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401084
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-13)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1B-727-U-T3
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 2700K, 450mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2919 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

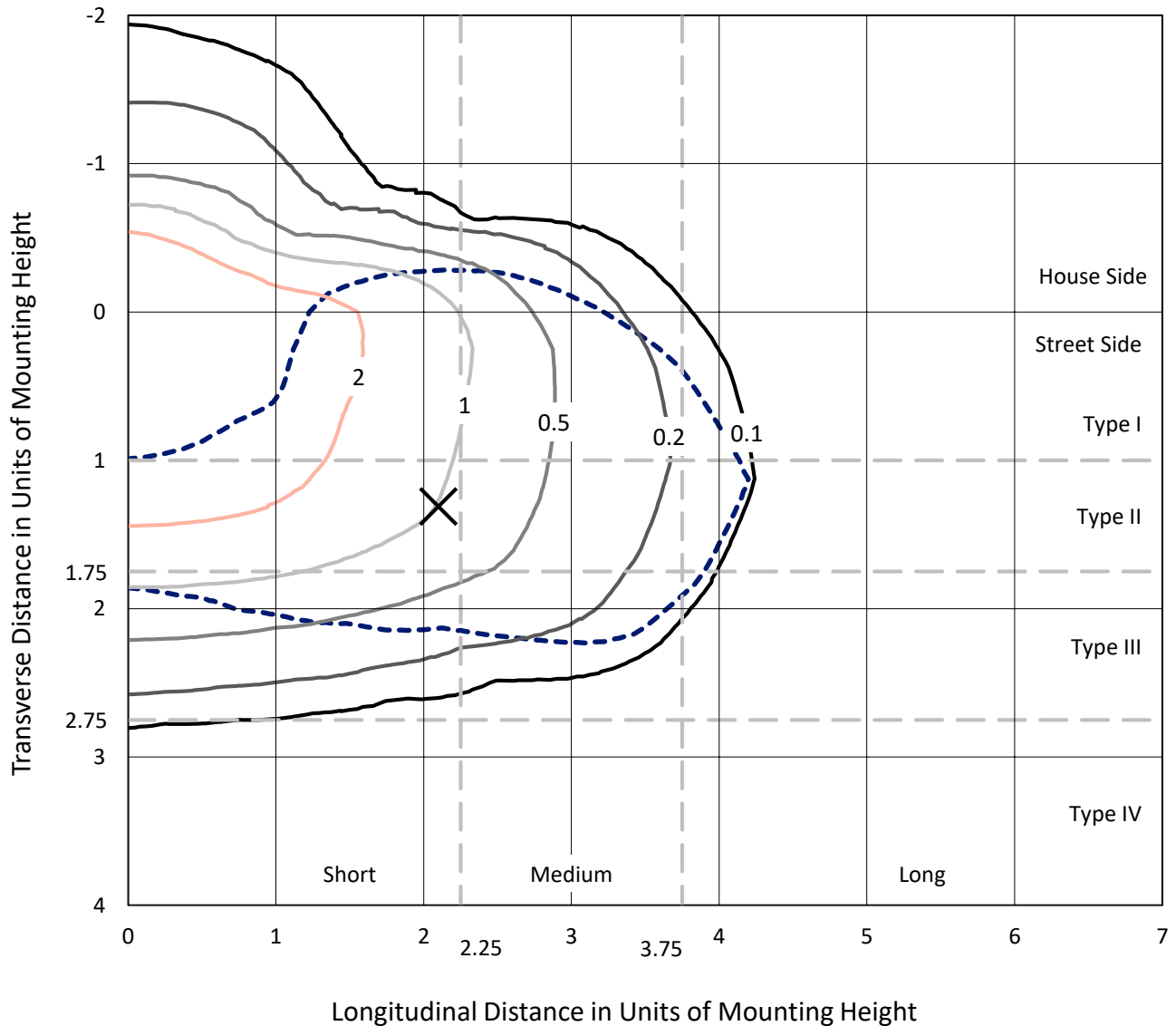
Input Watts (W): 25.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P401084
 CATALOG NUMBER: ENT-SA1B-727-U-T3

Iso-Footcandle Lines of Horizontal Illumination

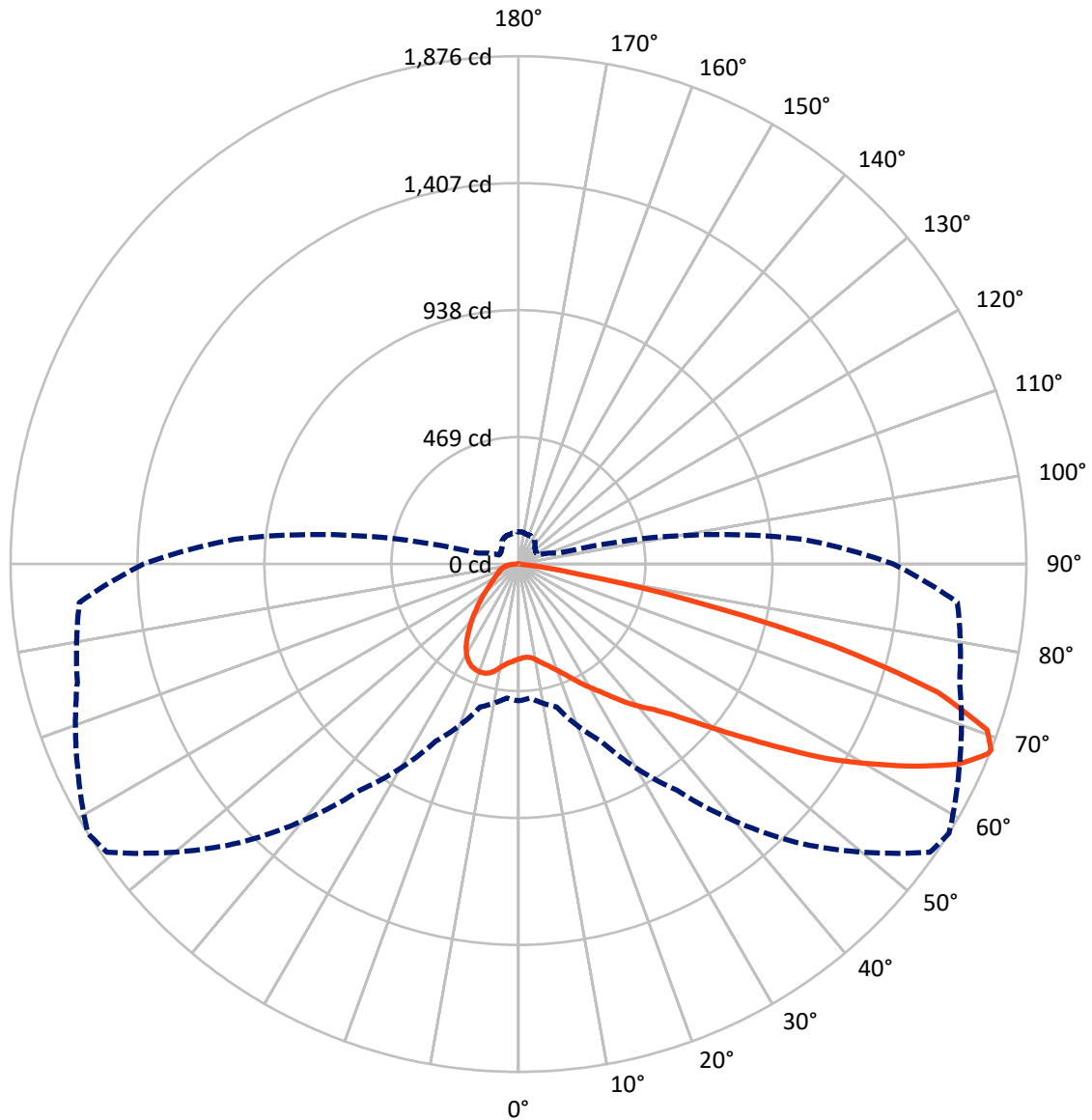
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.9 fc
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P401084
CATALOG NUMBER: ENT-SA1B-727-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

REPORT NUMBER: P401084

CATALOG NUMBER: ENT-SA1B-727-U-T3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	683.5	0.0	683.5
	% Fixture	23.4	0.0	23.4
Street Side	Lumens	2235.5	0.0	2235.5
	% Fixture	76.6	0.0	76.6
Total	Lumens	2919.0	0.0	2919.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.5	1.2
10°-20°	112.9	3.9
20°-30°	203.1	7.0
30°-40°	298.3	10.2
40°-50°	437.5	15.0
50°-60°	654.0	22.4
60°-70°	764.7	26.2
70°-80°	377.0	12.9
80°-90°	36.8	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°	2919.0	100.0
0°-180°	2919.0	100.0



REPORT NUMBER: P401084

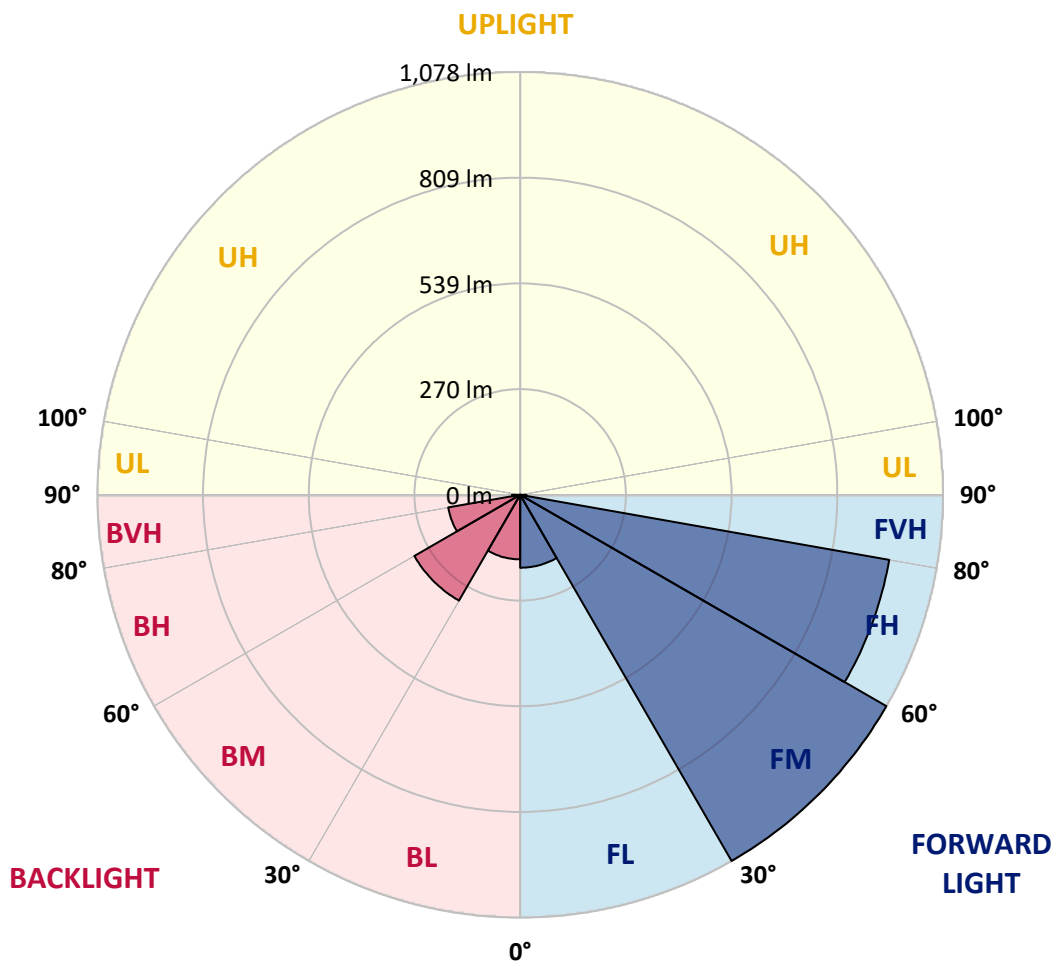
CATALOG NUMBER: ENT-SA1B-727-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	186.0	6.4			
FM (30°-60°)	1078.2	36.9			
FH (60°-80°)	955.6	32.7			G1/1800
FVH (80°-90°)	15.8	0.5			G1/100
BL (0°-30°)	164.6	5.6	B1/500		
BM (30°-60°)	311.7	10.7	B1/1000		
BH (60°-80°)	186.2	6.4	B1/500		G1/500
BVH (80°-90°)	20.9	0.7			G1/100
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: P401084

CATALOG NUMBER: ENT-SA1B-727-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	350.5	350.5	350.5	350.5	350.5	350.5	350.5	350.5	350.5	350.5	350.5
2.5°	342.0	342.0	343.2	343.6	344.4	345.2	346.0	346.5	347.7	349.3	350.1
5°	339.1	339.5	340.3	340.8	342.0	343.6	344.8	345.6	347.7	350.9	353.0
7.5°	345.6	346.9	347.3	347.7	348.1	349.3	349.3	349.7	351.8	355.0	357.9
10°	356.2	357.1	358.3	359.5	360.7	361.5	359.1	359.5	360.3	363.6	367.7
12.5°	369.7	369.7	370.1	371.7	373.0	375.4	373.0	373.0	373.0	375.8	380.7
15°	384.8	384.0	384.0	385.6	386.0	387.6	386.4	386.4	388.0	390.9	395.8
17.5°	401.9	403.1	401.9	401.1	399.9	400.7	401.5	402.3	405.6	410.0	412.9
20°	426.8	428.8	428.0	424.7	419.4	417.0	419.8	421.5	428.0	433.3	433.7
22.5°	466.3	465.1	463.8	458.1	447.5	441.0	441.4	443.9	454.1	462.2	458.1
25°	503.0	504.2	504.2	496.0	482.2	468.7	470.0	471.2	481.4	488.7	477.7
27.5°	547.4	546.6	546.2	535.2	518.5	505.4	498.5	501.8	509.1	511.9	490.7
30°	593.5	596.7	593.5	578.0	562.1	545.4	531.5	530.7	534.4	534.0	506.2
32.5°	648.9	646.0	644.8	626.9	606.9	584.9	567.4	564.5	562.5	559.6	524.6
35°	691.7	695.4	695.4	679.9	656.2	634.6	607.3	604.9	600.0	590.6	548.6
37.5°	742.2	741.4	744.3	726.3	702.7	681.9	656.6	649.7	638.7	624.8	577.2
40°	791.6	793.6	800.1	778.5	756.9	740.6	704.7	692.1	675.4	662.8	618.7
42.5°	858.8	861.7	864.1	846.2	820.5	805.8	750.4	734.5	725.1	722.7	673.8
45°	940.3	945.2	947.3	930.9	916.3	881.2	807.9	793.2	783.0	793.6	748.8
47.5°	1018.6	1016.1	1025.5	1025.1	1026.7	984.8	890.6	868.6	858.8	885.7	834.8
50°	1062.6	1066.3	1086.7	1107.4	1136.4	1106.2	986.4	964.4	953.0	986.4	935.8
52.5°	1085.4	1090.3	1117.6	1175.9	1237.5	1223.2	1101.7	1077.3	1067.5	1100.1	1044.3
55°	1087.5	1090.3	1127.0	1217.5	1314.5	1319.0	1233.4	1210.2	1196.7	1217.9	1162.5
57.5°	1053.6	1045.1	1108.3	1223.6	1363.8	1418.8	1378.1	1361.4	1323.5	1346.3	1309.2
60°	993.3	1001.9	1063.8	1198.3	1384.6	1496.7	1523.2	1497.9	1453.9	1463.3	1467.3
62.5°	902.0	913.0	977.4	1139.6	1367.9	1562.7	1657.3	1644.6	1585.5	1580.7	1588.0
65°	772.0	765.5	837.2	1011.2	1288.8	1584.7	1788.9	1783.6	1713.1	1655.7	1658.5
67.5°	556.8	550.7	600.8	780.5	1074.8	1502.8	1859.0	1870.9	1790.2	1688.7	1644.6
68°	505.4	496.9	547.0	721.4	1019.8	1455.5	1855.4	1875.8	1795.9	1686.6	1627.5
70°	291.0	277.2	325.7	470.8	750.8	1225.2	1780.4	1836.6	1782.4	1647.1	1515.4
72.5°	91.3	91.3	125.9	190.3	368.5	775.2	1523.2	1619.0	1630.4	1497.1	1259.5
75°	57.1	57.1	65.6	90.1	146.7	328.9	1050.8	1196.7	1295.3	1260.3	918.3
77.5°	38.7	37.9	43.6	55.8	81.9	105.6	527.4	648.1	792.4	860.4	537.2
80°	21.2	21.6	26.9	33.4	46.5	48.9	154.9	218.9	348.9	408.8	203.8
82.5°	12.2	11.8	13.0	14.7	20.4	21.2	44.4	54.6	91.3	84.8	54.6
85°	0.0	0.4	0.4	0.4	0.8	2.0	5.7	8.6	13.9	19.2	13.5
87.5°	0.0	0.0	0.0	0.0	0.4	0.4	0.8	0.8	0.8	0.8	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



REPORT NUMBER: P401084

CATALOG NUMBER: ENT-SA1B-727-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	350.5	350.5	350.5	350.5	350.5	350.5	350.5	350.5	350.5	350.5	350.5
2.5°	350.9	352.2	354.2	355.8	356.6	355.8	358.7	358.3	359.1	359.1	359.9
5°	354.6	356.2	359.9	361.9	364.0	364.8	368.1	368.9	370.5	371.3	370.9
7.5°	359.9	361.9	366.4	370.1	373.0	375.0	380.3	382.7	385.2	386.0	386.8
10°	369.7	372.5	377.4	381.9	386.0	388.8	393.3	396.6	399.0	399.9	400.7
12.5°	382.7	386.0	392.1	398.2	402.7	404.3	403.9	403.1	403.1	402.7	403.1
15°	397.8	401.1	408.8	414.5	414.9	409.6	402.3	398.6	397.8	397.8	398.2
17.5°	415.3	419.4	424.3	427.6	419.8	406.8	398.2	394.6	393.7	393.3	392.5
20°	435.3	437.8	439.4	435.3	418.2	403.1	393.3	388.0	384.0	383.5	381.9
22.5°	456.5	455.7	453.7	439.0	413.7	394.6	381.1	371.3	366.0	365.6	364.0
25°	472.0	468.7	462.6	439.8	405.6	380.7	361.5	346.0	339.1	335.9	336.7
27.5°	482.2	475.3	464.7	435.7	391.3	359.5	332.6	312.2	302.0	300.4	301.6
30°	494.4	483.4	466.3	425.5	370.9	329.7	294.7	274.3	268.6	265.8	266.6
32.5°	509.1	494.8	471.6	410.0	345.2	295.1	257.2	242.9	236.4	231.1	232.7
35°	528.2	510.3	480.1	388.0	312.6	258.4	230.3	217.2	205.4	199.7	200.1
37.5°	550.7	530.3	487.5	362.4	277.2	230.7	207.1	191.6	176.9	165.9	163.9
40°	586.5	569.8	493.6	333.8	243.3	207.9	184.2	166.7	152.8	141.8	140.6
42.5°	646.4	617.5	494.0	299.6	214.4	188.3	165.5	146.3	130.8	121.5	121.1
45°	717.0	672.1	485.4	262.9	189.1	168.7	148.8	127.2	118.2	112.1	111.3
47.5°	800.5	734.9	466.7	228.7	167.5	149.6	131.7	118.6	112.1	107.6	107.6
50°	895.9	808.7	447.9	199.3	146.7	134.1	121.9	114.9	110.1	106.0	105.6
52.5°	1003.5	895.9	441.8	169.6	129.6	119.8	118.6	112.1	108.0	105.2	104.3
55°	1131.9	993.7	447.5	146.3	116.2	114.1	116.6	111.3	108.4	103.9	102.7
57.5°	1280.3	1089.1	441.4	126.8	106.8	108.8	114.1	111.3	108.8	103.1	101.5
60°	1420.1	1174.3	399.9	110.5	97.8	102.3	110.9	107.6	103.9	102.7	101.9
62.5°	1495.1	1202.0	318.7	97.8	90.9	95.8	105.6	101.5	99.0	101.9	102.3
65°	1495.9	1170.6	234.4	88.4	85.2	90.1	100.3	99.0	100.7	107.2	108.4
67.5°	1412.7	1075.2	165.5	79.9	79.5	85.6	102.7	110.9	112.1	118.6	118.6
68°	1384.2	1051.6	153.7	78.7	78.3	85.6	104.8	112.9	113.7	119.8	119.4
70°	1227.7	889.0	111.3	73.8	76.2	91.7	115.8	118.6	113.7	120.6	120.2
72.5°	959.5	657.5	83.1	68.5	72.6	90.5	116.6	113.7	106.4	108.0	106.0
75°	648.5	419.0	68.5	62.8	64.4	76.6	106.0	107.2	98.6	97.0	94.6
77.5°	339.5	196.5	55.4	55.8	57.5	66.4	94.6	97.4	89.7	84.8	84.0
80°	125.1	77.9	45.2	49.3	50.1	58.3	81.1	85.6	78.3	74.6	73.8
82.5°	45.7	38.7	37.5	43.2	42.4	49.7	70.9	74.2	66.4	62.8	60.7
85°	12.6	14.3	23.6	33.8	33.0	38.7	57.1	59.9	53.4	44.0	42.8
87.5°	0.8	2.9	9.4	20.0	20.8	24.0	41.2	45.2	39.5	32.6	32.2
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)