

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: P401027

Luminaire Tested: **ENT-SA1A-827-U-T2-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401027
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-SA1A-827-U-T2-HSS
Description: ENTRI LED LUMINAIRE
(1) 80 CRI, 2700K, 350mA 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: 1521 lumens
Efficiency: N/A
Efficacy: 75.7 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 - G0

Input Watts (W): 20.1
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

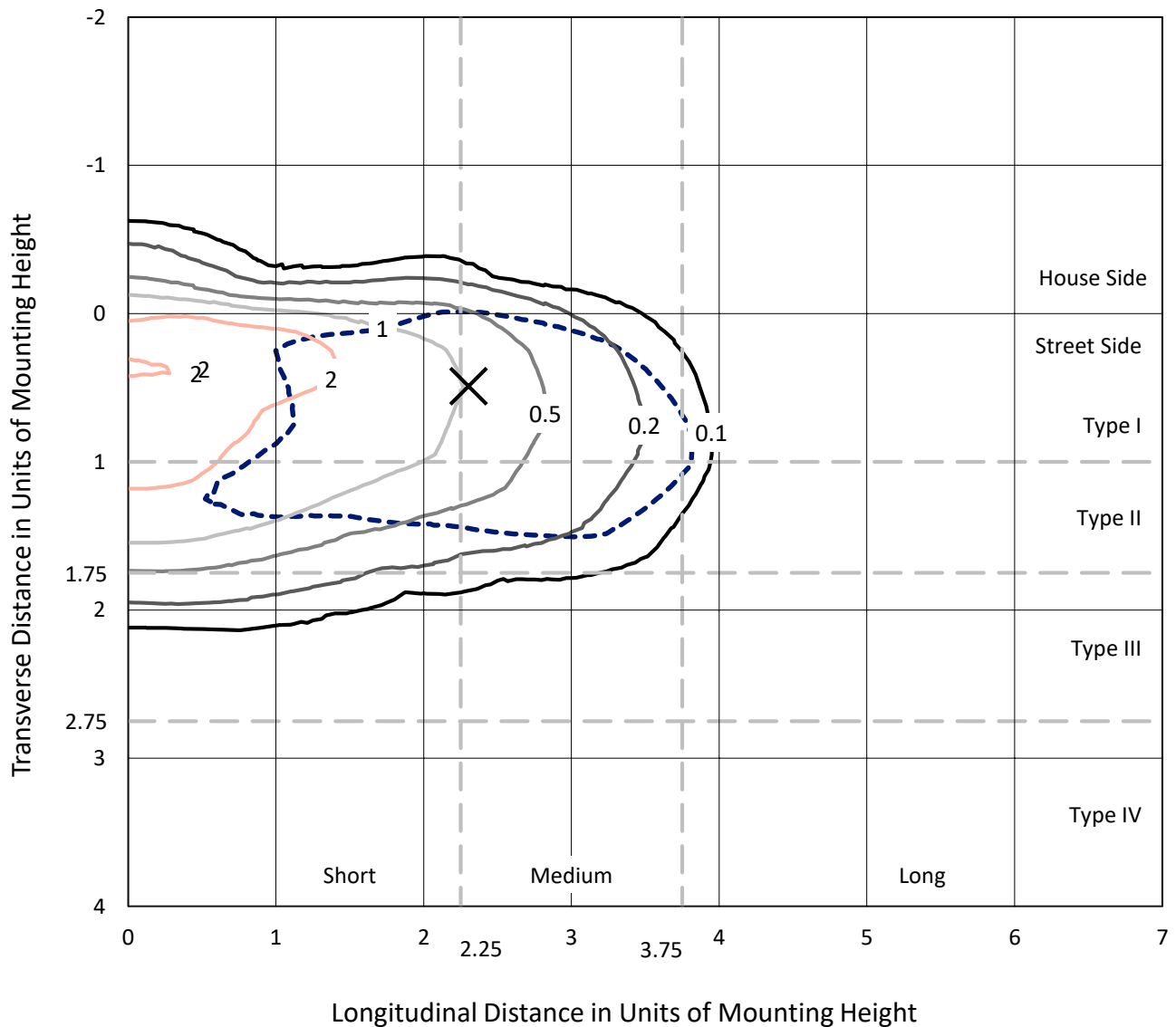


REPORT NUMBER: P401027

CATALOG NUMBER: ENT-SA1A-827-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

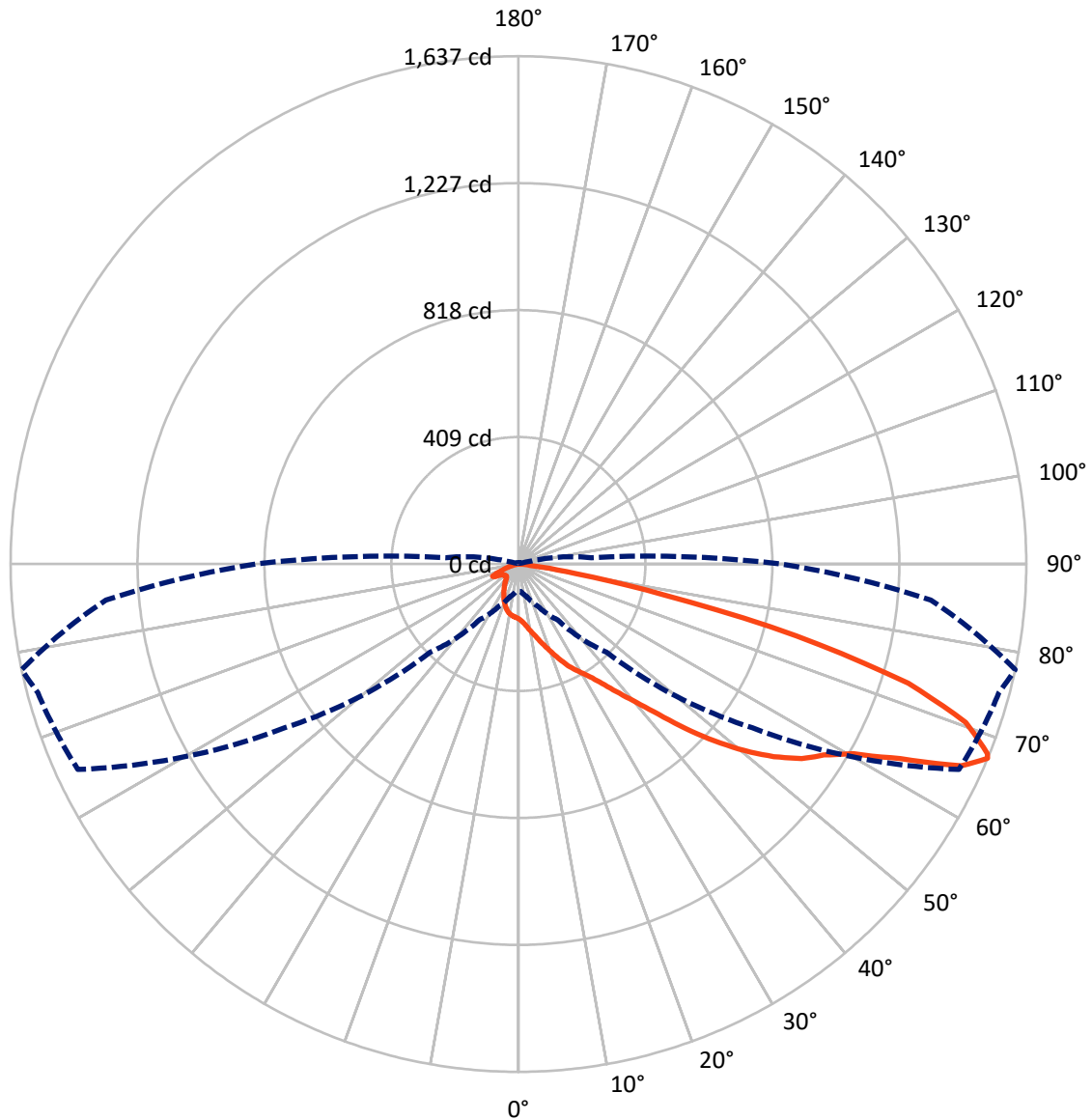


Based on 10 foot mounting height. Maximum calculated value = 2.8 fc
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P401027

CATALOG NUMBER: ENT-SA1A-827-U-T2-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P401027

CATALOG NUMBER: ENT-SA1A-827-U-T2-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	107.3	0.0	107.3
	% Fixture	7.1	0.0	7.1
Street Side	Lumens	1413.7	0.0	1413.7
	% Fixture	92.9	0.0	92.9
Total	Lumens	1521.0	0.0	1521.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.0	1.1
10°-20°	48.8	3.2
20°-30°	86.1	5.7
30°-40°	151.9	10.0
40°-50°	261.1	17.2
50°-60°	393.0	25.8
60°-70°	386.7	25.4
70°-80°	169.0	11.1
80°-90°	7.5	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°	1521.0	100.0
0°-180°	1521.0	100.0



REPORT NUMBER: P401027

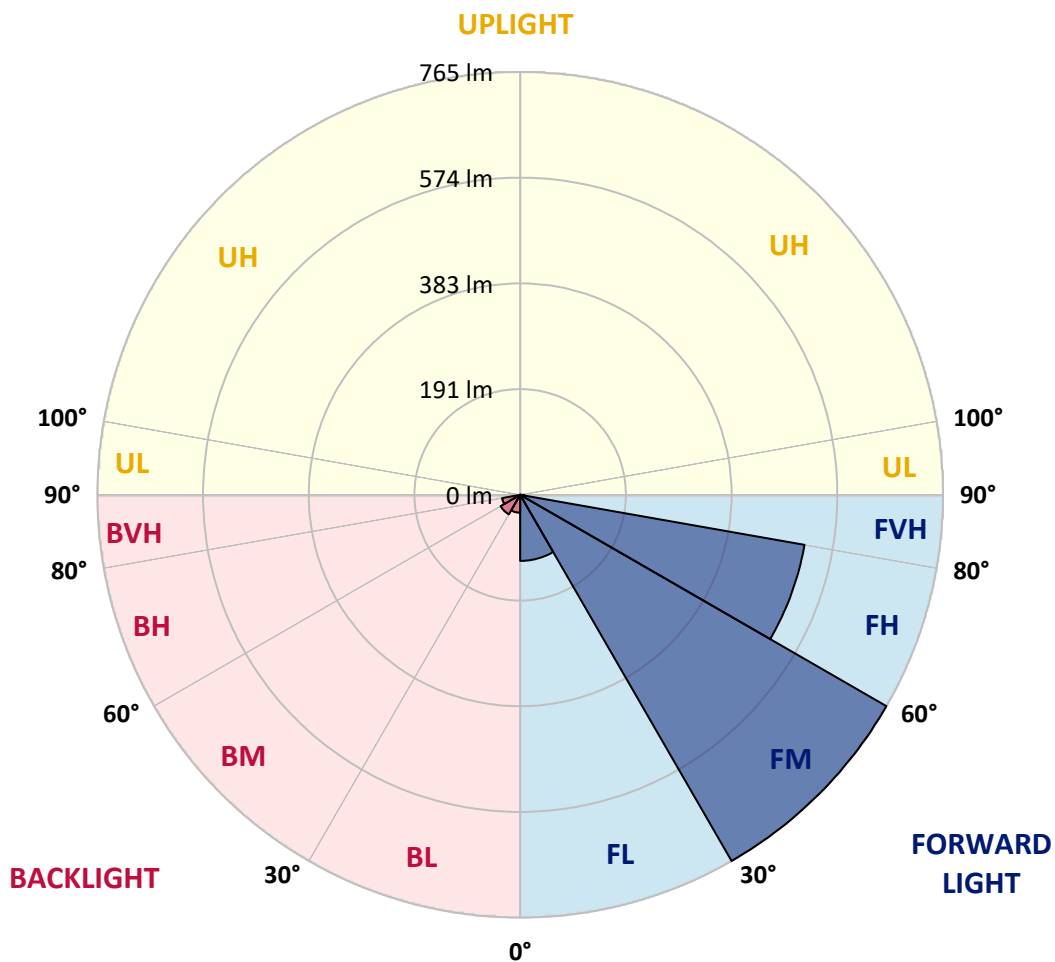
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	119.5	7.9			
FM (30°-60°)	765.1	50.3			
FH (60°-80°)	522.4	34.3			G0/660
FVH (80°-90°)	6.7	0.4			G0/10
BL (0°-30°)	32.4	2.1	B0/110		
BM (30°-60°)	40.8	2.7	B0/220		
BH (60°-80°)	33.3	2.2	B0/110		G0/110
BVH (80°-90°)	0.8	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-G0

Type II Medium





REPORT NUMBER: P401027

CATALOG NUMBER: ENT-SA1A-827-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	176.6	176.6	176.6	176.6	176.6	176.6	176.6	176.6	176.6	176.6	176.6
2.5°	202.6	203.5	202.3	201.5	199.2	196.3	193.5	189.2	184.6	182.9	180.0
5°	227.5	227.5	227.5	225.2	223.2	217.7	211.2	204.6	196.0	192.9	186.3
7.5°	240.6	240.9	241.7	241.7	240.6	236.9	229.7	222.3	209.5	205.2	194.6
10°	242.0	243.2	245.5	248.9	251.5	253.5	249.2	241.2	225.7	220.6	205.2
12.5°	238.3	238.9	242.6	248.9	257.2	265.5	265.8	260.9	243.7	236.6	218.0
15°	229.7	230.6	236.0	246.0	258.9	273.8	282.3	280.9	264.9	256.6	232.3
17.5°	216.0	216.9	223.7	238.6	257.5	279.2	297.5	304.6	285.8	277.8	246.9
20°	215.5	215.7	218.3	229.5	251.8	282.3	312.3	329.2	311.2	302.6	264.0
22.5°	252.0	249.8	244.0	236.9	246.6	281.5	325.8	355.2	342.6	329.2	283.8
25°	292.9	293.8	287.5	270.6	258.3	280.0	336.0	384.6	372.1	358.6	304.0
27.5°	335.8	334.3	328.9	313.5	292.9	290.3	343.5	408.3	400.3	384.1	322.0
30°	377.5	376.3	372.3	356.6	334.3	316.9	349.2	429.8	427.2	409.2	336.6
32.5°	425.2	427.2	422.1	401.5	374.3	352.9	361.5	452.4	459.8	437.8	351.8
35°	480.6	480.6	470.1	451.2	423.2	393.2	386.1	477.2	501.2	477.5	375.8
37.5°	526.4	530.1	523.8	496.6	470.4	438.9	423.5	507.8	552.4	528.4	408.1
40°	562.4	568.7	568.9	542.1	517.8	497.2	475.8	550.9	616.7	585.8	446.6
42.5°	595.8	596.9	601.8	586.4	562.1	556.7	534.6	602.1	697.0	660.7	498.1
45°	638.4	640.7	637.8	626.4	605.5	612.7	600.4	667.0	787.3	756.7	558.7
47.5°	701.0	706.4	702.1	681.5	656.1	669.5	660.7	731.5	889.3	852.1	624.4
50°	759.5	763.8	768.4	761.8	736.4	723.5	712.7	799.8	976.7	945.3	689.0
52.5°	765.8	769.8	795.0	818.1	835.0	801.3	767.3	869.0	1057.6	1031.3	748.1
55°	725.0	727.5	769.5	815.3	892.7	904.1	847.6	937.3	1125.3	1107.3	787.8
57.5°	611.2	622.1	681.8	751.8	878.4	965.3	961.6	1016.7	1169.3	1161.0	839.0
60°	401.5	413.5	484.9	590.9	773.3	949.0	1086.7	1135.9	1231.0	1240.2	928.7
62.5°	208.0	222.0	284.9	378.9	560.4	826.4	1129.3	1331.6	1349.3	1380.5	1088.7
65°	118.9	121.7	153.2	222.0	346.9	591.8	1078.2	1525.4	1505.1	1568.2	1293.0
67°	88.3	88.3	110.3	150.9	219.7	402.3	919.6	1566.2	1603.1	1636.5	1334.2
67.5°	79.2	83.4	102.3	139.2	197.2	356.9	860.4	1555.4	1609.4	1630.2	1319.9
70°	54.3	57.2	73.4	99.7	132.9	185.7	564.1	1375.6	1550.5	1529.4	1196.2
72.5°	32.6	33.7	48.6	71.7	99.2	99.4	307.8	1044.1	1313.9	1313.6	977.0
75°	20.3	21.4	28.6	48.0	69.4	62.3	142.3	710.4	943.6	925.3	654.7
77.5°	11.4	13.1	17.1	26.3	44.0	39.7	60.0	398.1	509.8	478.4	325.2
80°	4.6	5.4	9.7	12.6	24.9	23.7	24.6	140.0	206.3	186.0	108.9
82.5°	1.1	1.4	3.4	6.0	9.7	9.7	7.7	38.3	48.9	45.4	28.0
85°	0.0	0.0	0.3	0.3	0.3	0.6	2.0	4.3	5.1	6.0	4.6
87.5°	0.0	0.0	0.0	0.3	0.3	0.3	0.6	0.9	0.9	0.9	0.9
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: P401027

CATALOG NUMBER: ENT-SA1A-827-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	176.6	176.6	176.6	176.6	176.6	176.6	176.6	176.6	176.6	176.6	176.6
2.5°	177.7	175.7	171.7	167.5	163.2	159.7	156.9	152.9	152.3	152.3	152.3
5°	181.5	176.9	167.7	158.6	149.5	141.2	135.2	130.3	126.0	124.6	125.7
7.5°	186.9	178.6	162.6	146.6	132.3	120.6	112.0	105.2	102.0	100.3	98.9
10°	194.0	181.2	155.7	132.3	114.3	100.3	91.2	84.6	81.4	79.4	79.7
12.5°	201.7	183.2	147.2	116.9	96.9	84.0	76.3	70.9	65.7	62.6	63.4
15°	209.5	184.6	136.6	102.6	83.4	72.0	61.2	51.4	48.0	47.4	47.1
17.5°	218.0	184.3	124.9	89.2	72.0	56.0	45.1	44.0	43.7	43.7	43.4
20°	226.9	182.9	111.4	78.0	60.6	42.6	40.9	40.3	39.4	39.1	38.9
22.5°	236.6	180.3	99.2	68.3	45.1	38.9	36.6	34.9	33.4	32.6	32.9
25°	245.5	175.5	87.2	59.2	38.6	34.9	31.7	29.1	27.7	26.6	26.9
27.5°	251.5	166.9	76.9	47.7	35.4	30.9	27.1	24.6	22.6	21.7	21.7
30°	252.0	154.6	67.7	39.1	32.3	27.1	23.1	20.3	19.1	18.6	18.3
32.5°	251.5	142.0	60.9	36.0	29.4	23.7	19.7	17.7	16.6	16.0	16.0
35°	254.3	129.2	54.6	33.1	26.3	20.9	17.4	15.4	14.6	14.0	14.0
37.5°	262.9	120.3	48.0	30.3	23.4	18.3	15.7	14.0	13.1	12.6	12.6
40°	274.6	112.9	40.0	27.4	20.6	16.6	14.3	12.9	11.7	11.1	11.1
42.5°	295.2	110.0	33.4	24.6	18.0	14.9	13.1	11.4	10.3	9.7	9.7
45°	325.8	111.4	30.6	22.0	16.3	13.4	11.7	10.0	8.9	8.6	8.6
47.5°	359.5	117.4	28.6	19.7	14.9	12.6	10.6	8.9	7.7	7.4	7.4
50°	397.2	126.9	26.9	17.4	13.4	11.4	9.4	7.7	6.9	6.6	6.6
52.5°	433.2	138.9	25.1	15.7	12.6	10.3	8.3	6.9	6.3	6.0	6.0
55°	460.6	146.6	23.7	14.6	11.7	9.4	7.4	6.6	5.7	5.4	5.4
57.5°	498.9	159.5	22.0	13.1	10.6	8.6	6.9	6.0	5.1	5.1	5.1
60°	576.7	194.0	19.4	12.0	9.4	7.7	6.6	5.4	4.9	4.6	4.6
62.5°	716.7	251.2	16.9	11.1	8.3	6.9	5.7	4.9	4.3	3.7	3.7
65°	851.6	274.9	14.3	9.7	7.4	6.0	5.1	4.3	3.1	2.6	2.6
67°	844.1	235.2	12.0	8.3	6.3	5.4	4.3	3.4	2.3	1.4	1.4
67.5°	824.1	218.9	11.7	8.0	6.0	5.1	4.3	3.1	2.0	1.1	1.1
70°	700.4	153.2	9.1	6.3	5.1	4.6	3.4	2.3	1.1	0.6	0.6
72.5°	568.9	121.4	7.1	5.1	4.3	3.4	2.9	1.4	0.9	0.3	0.3
75°	402.3	74.6	6.3	4.6	3.4	2.6	2.3	1.4	0.9	0.6	0.3
77.5°	198.6	34.3	5.1	4.0	3.1	2.6	2.0	1.7	1.4	1.1	0.6
80°	58.3	11.1	3.4	2.9	2.9	2.6	2.3	2.0	1.7	1.4	0.9
82.5°	13.1	4.0	1.1	1.4	2.0	2.0	2.0	1.4	1.1	0.6	0.3
85°	1.7	0.9	0.9	0.9	1.1	1.1	0.9	0.6	0.6	0.0	0.0
87.5°	0.6	0.6	0.6	0.9	0.9	0.9	0.6	0.3	0.3	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)