

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: P400966

Luminaire Tested: **ENT-SA1A-740-U-T2-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400966
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-740-U-T2-HSS
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 4000K, 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: 2069 lumens
Efficiency: N/A
Efficacy: 102.9 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): 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

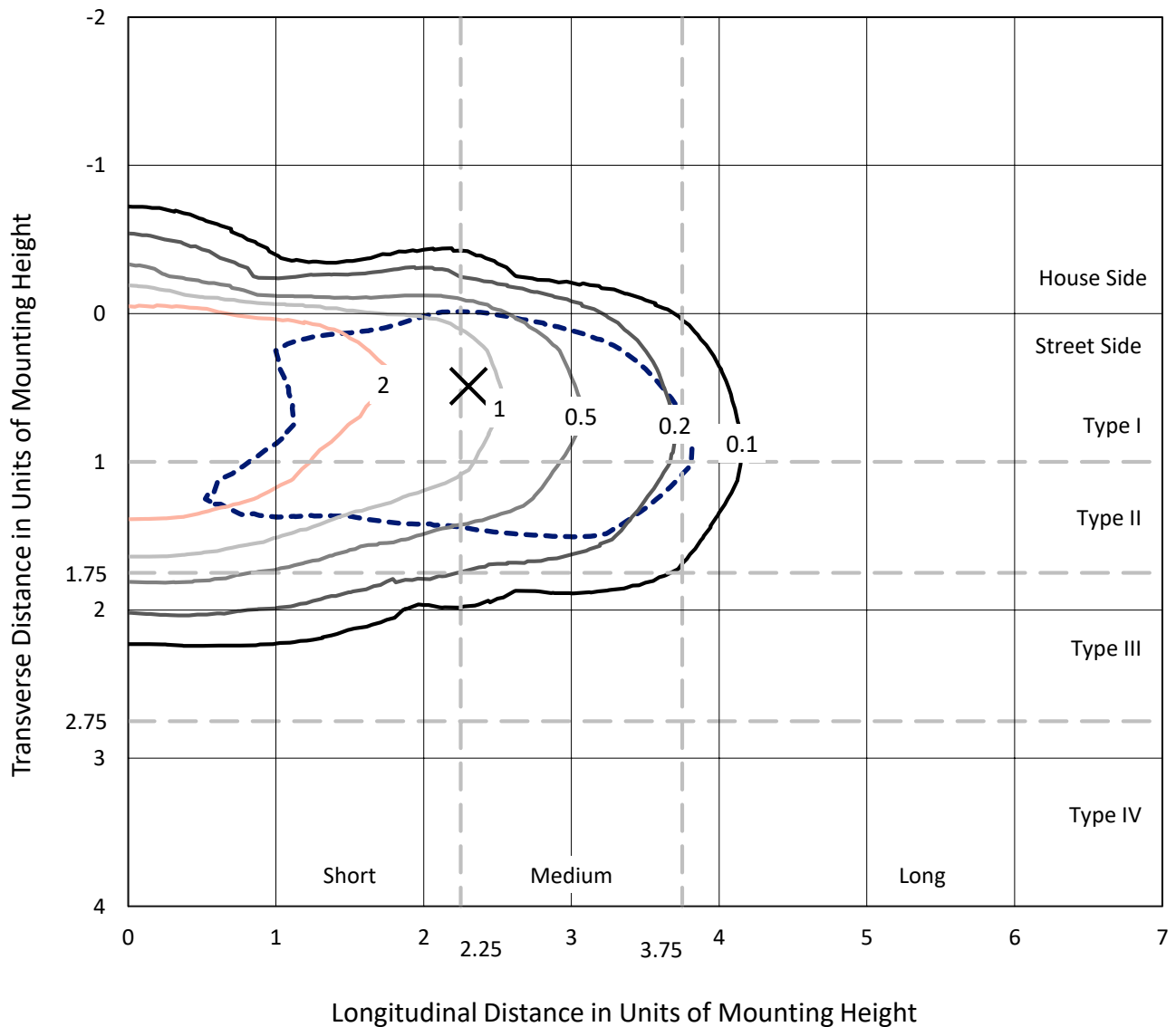


REPORT NUMBER: P400966

CATALOG NUMBER: ENT-SA1A-740-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

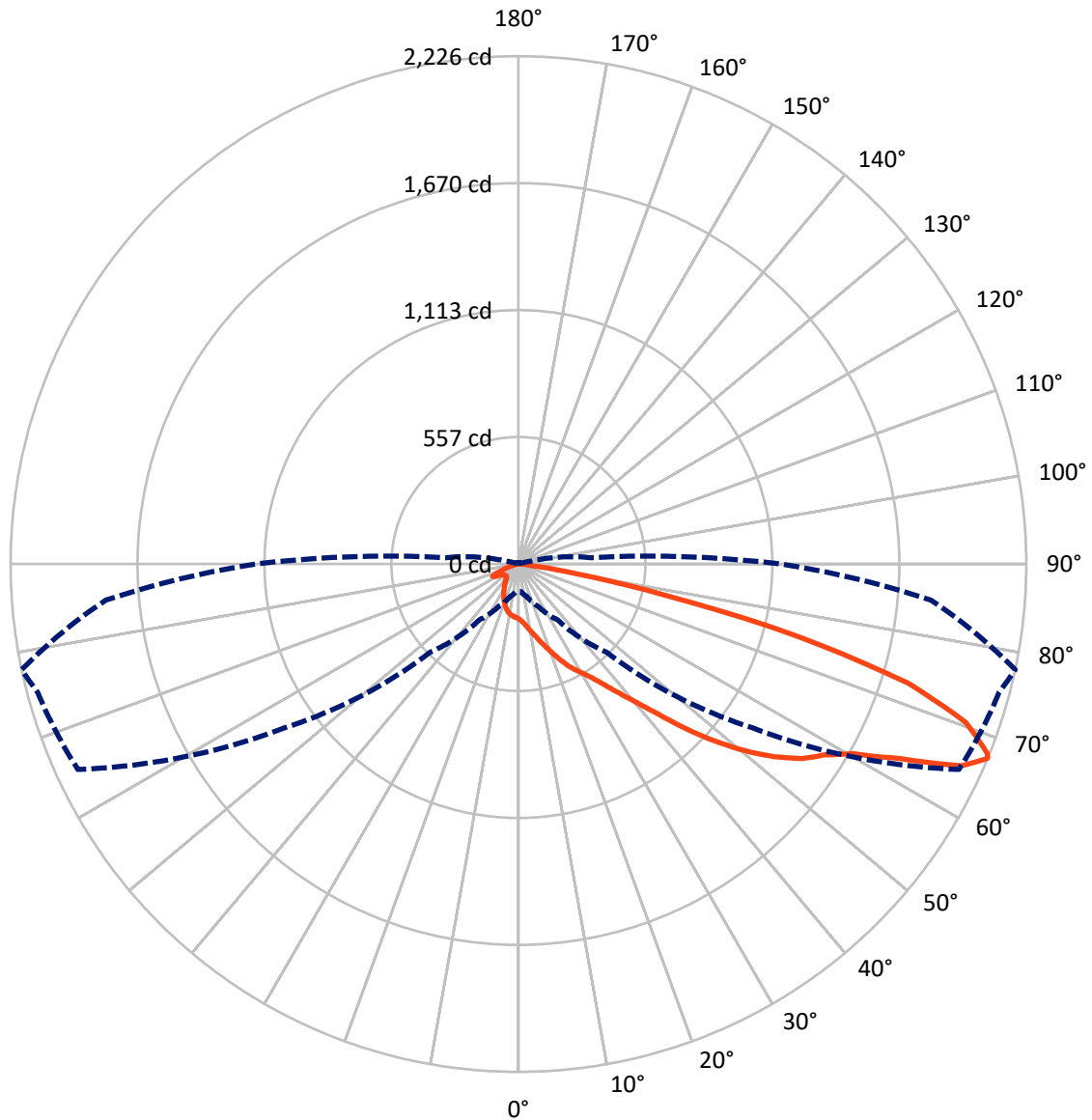


Based on 10 foot mounting height. Maximum calculated value = 3.8 fc
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P400966

CATALOG NUMBER: ENT-SA1A-740-U-T2-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P400966

CATALOG NUMBER: ENT-SA1A-740-U-T2-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	146.0	0.0	146.0
	% Fixture	7.1	0.0	7.1
Street Side	Lumens	1923.0	0.0	1923.0
	% Fixture	92.9	0.0	92.9
Total	Lumens	2069.0	0.0	2069.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.2	1.1
10°-20°	66.3	3.2
20°-30°	117.2	5.7
30°-40°	206.6	10.0
40°-50°	355.1	17.2
50°-60°	534.5	25.8
60°-70°	526.0	25.4
70°-80°	229.9	11.1
80°-90°	10.2	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°	2069.0	100.0
0°-180°	2069.0	100.0



REPORT NUMBER: P400966

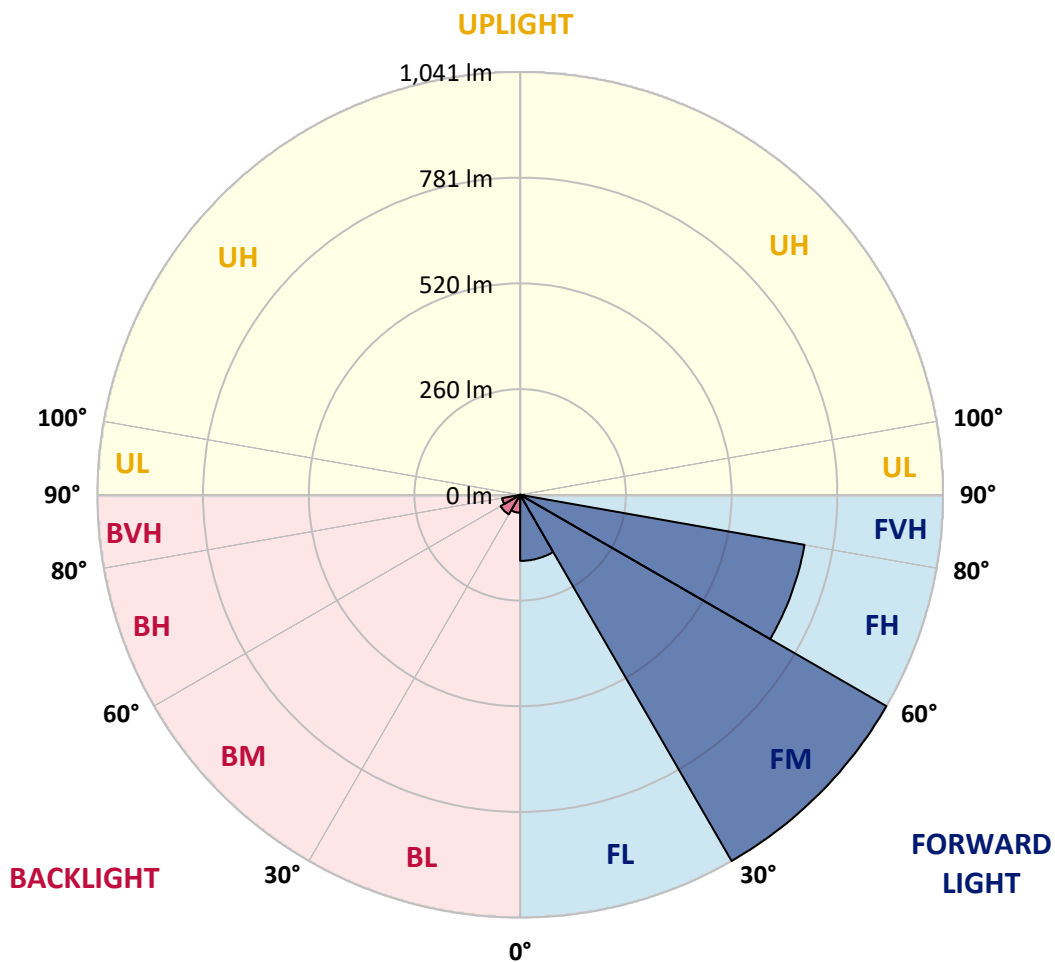
CATALOG NUMBER: ENT-SA1A-740-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	162.6	7.9			
FM	(30°-60°)	1040.7	50.3			
FH	(60°-80°)	710.6	34.3			G1/1800
FVH	(80°-90°)	9.1	0.4			G0/10
BL	(0°-30°)	44.1	2.1	B0/110		
BM	(30°-60°)	55.5	2.7	B0/220		
BH	(60°-80°)	45.3	2.2	B0/110		G0/110
BVH	(80°-90°)	1.0	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: P400966

CATALOG NUMBER: ENT-SA1A-740-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	240.2	240.2	240.2	240.2	240.2	240.2	240.2	240.2	240.2	240.2	240.2
2.5°	275.6	276.8	275.2	274.0	270.9	267.0	263.2	257.3	251.1	248.8	244.9
5°	309.4	309.4	309.4	306.3	303.6	296.2	287.3	278.3	266.7	262.4	253.4
7.5°	327.3	327.7	328.8	328.8	327.3	322.2	312.5	302.4	284.9	279.1	264.7
10°	329.2	330.8	333.9	338.6	342.1	344.8	339.0	328.1	307.1	300.1	279.1
12.5°	324.2	325.0	330.0	338.6	349.8	361.1	361.5	354.9	331.6	321.9	296.6
15°	312.5	313.7	321.1	334.7	352.2	372.4	384.0	382.1	360.3	349.1	316.0
17.5°	293.9	295.0	304.4	324.6	350.2	379.8	404.6	414.4	388.7	377.8	335.8
20°	293.1	293.5	297.0	312.1	342.5	384.0	424.9	447.8	423.3	411.6	359.2
22.5°	342.8	339.7	332.0	322.2	335.5	382.9	443.1	483.2	466.1	447.8	386.0
25°	398.4	399.6	391.0	368.1	351.4	380.9	457.1	523.2	506.1	487.8	413.6
27.5°	456.7	454.8	447.4	426.4	398.4	394.9	467.2	555.5	544.6	522.4	438.1
30°	513.5	511.9	506.5	485.1	454.8	431.1	475.0	584.6	581.1	556.6	457.9
32.5°	578.4	581.1	574.1	546.1	509.2	480.1	491.7	615.3	625.4	595.5	478.5
35°	653.8	653.8	639.4	613.8	575.7	534.9	525.1	649.1	681.8	649.5	511.2
37.5°	716.0	721.1	712.5	675.6	639.8	597.1	576.1	690.7	751.4	718.7	555.1
40°	765.0	773.5	773.9	737.4	704.3	676.4	647.2	749.4	838.8	796.9	607.6
42.5°	810.5	812.0	818.6	797.6	764.6	757.2	727.3	819.0	948.1	898.7	677.5
45°	868.4	871.5	867.6	852.1	823.7	833.4	816.7	907.2	1070.9	1029.3	759.9
47.5°	953.5	960.9	955.1	927.1	892.5	910.7	898.7	995.1	1209.7	1159.1	849.3
50°	1033.2	1039.0	1045.2	1036.3	1001.7	984.2	969.4	1088.0	1328.6	1285.9	937.2
52.5°	1041.7	1047.2	1081.4	1112.9	1135.8	1089.9	1043.7	1182.1	1438.6	1402.9	1017.6
55°	986.2	989.7	1046.8	1109.0	1214.3	1229.9	1152.9	1275.0	1530.7	1506.3	1071.7
57.5°	831.5	846.2	927.5	1022.7	1194.9	1313.1	1308.0	1383.0	1590.6	1579.3	1141.3
60°	546.1	562.5	659.6	803.9	1051.8	1290.9	1478.3	1545.1	1674.6	1687.0	1263.3
62.5°	283.0	302.0	387.5	515.4	762.3	1124.1	1536.2	1811.4	1835.5	1877.9	1481.0
65°	161.7	165.6	208.3	302.0	471.9	805.0	1466.6	2074.9	2047.3	2133.2	1758.9
67°	120.1	120.1	150.0	205.2	298.9	547.3	1250.9	2130.5	2180.7	2226.1	1814.9
67.5°	107.7	113.5	139.2	189.3	268.2	485.5	1170.4	2115.7	2189.2	2217.6	1795.5
70°	73.9	77.7	99.9	135.7	180.8	252.7	767.3	1871.2	2109.1	2080.4	1627.1
72.5°	44.3	45.9	66.1	97.6	134.9	135.3	418.6	1420.3	1787.3	1786.9	1329.0
75°	27.6	29.2	38.9	65.3	94.5	84.7	193.6	966.3	1283.5	1258.6	890.5
77.5°	15.5	17.9	23.3	35.8	59.9	54.0	81.6	541.5	693.5	650.7	442.4
80°	6.2	7.4	13.2	17.1	33.8	32.3	33.4	190.5	280.6	253.1	148.1
82.5°	1.6	1.9	4.7	8.2	13.2	13.2	10.5	52.1	66.5	61.8	38.1
85°	0.0	0.0	0.4	0.4	0.4	0.8	2.7	5.8	7.0	8.2	6.2
87.5°	0.0	0.0	0.0	0.4	0.4	0.4	0.8	1.2	1.2	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



REPORT NUMBER: P400966

CATALOG NUMBER: ENT-SA1A-740-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	240.2	240.2	240.2	240.2	240.2	240.2	240.2	240.2	240.2	240.2	240.2
2.5°	241.8	239.1	233.6	227.8	222.0	217.3	213.4	208.0	207.2	207.2	207.2
5°	246.8	240.6	228.2	215.7	203.3	192.0	183.9	177.3	171.4	169.5	171.0
7.5°	254.2	242.9	221.2	199.4	180.0	164.0	152.4	143.0	138.8	136.4	134.5
10°	263.9	246.4	211.8	180.0	155.5	136.4	124.0	115.1	110.8	108.1	108.5
12.5°	274.4	249.2	200.2	159.0	131.8	114.3	103.8	96.4	89.4	85.1	86.3
15°	284.9	251.1	185.8	139.5	113.5	98.0	83.2	70.0	65.3	64.5	64.1
17.5°	296.6	250.7	169.9	121.3	98.0	76.2	61.4	59.9	59.5	59.5	59.1
20°	308.6	248.8	151.6	106.1	82.4	57.9	55.6	54.8	53.6	53.3	52.9
22.5°	321.9	245.3	134.9	92.9	61.4	52.9	49.8	47.4	45.5	44.3	44.7
25°	333.9	238.7	118.6	80.5	52.5	47.4	43.1	39.6	37.7	36.2	36.5
27.5°	342.1	227.0	104.6	64.9	48.2	42.0	36.9	33.4	30.7	29.5	29.5
30°	342.8	210.3	92.1	53.3	43.9	36.9	31.5	27.6	26.0	25.3	24.9
32.5°	342.1	193.2	82.8	49.0	40.0	32.3	26.8	24.1	22.5	21.8	21.8
35°	346.0	175.7	74.2	45.1	35.8	28.4	23.7	21.0	19.8	19.0	19.0
37.5°	357.6	163.6	65.3	41.2	31.9	24.9	21.4	19.0	17.9	17.1	17.1
40°	373.6	153.5	54.4	37.3	28.0	22.5	19.4	17.5	15.9	15.2	15.2
42.5°	401.5	149.7	45.5	33.4	24.5	20.2	17.9	15.5	14.0	13.2	13.2
45°	443.1	151.6	41.6	29.9	22.2	18.3	15.9	13.6	12.1	11.7	11.7
47.5°	489.0	159.8	38.9	26.8	20.2	17.1	14.4	12.1	10.5	10.1	10.1
50°	540.3	172.6	36.5	23.7	18.3	15.5	12.8	10.5	9.3	8.9	8.9
52.5°	589.3	188.9	34.2	21.4	17.1	14.0	11.3	9.3	8.6	8.2	8.2
55°	626.6	199.4	32.3	19.8	15.9	12.8	10.1	8.9	7.8	7.4	7.4
57.5°	678.7	216.9	29.9	17.9	14.4	11.7	9.3	8.2	7.0	7.0	7.0
60°	784.4	263.9	26.4	16.3	12.8	10.5	8.9	7.4	6.6	6.2	6.2
62.5°	974.9	341.7	22.9	15.2	11.3	9.3	7.8	6.6	5.8	5.1	5.1
65°	1158.4	373.9	19.4	13.2	10.1	8.2	7.0	5.8	4.3	3.5	3.5
67°	1148.2	319.9	16.3	11.3	8.6	7.4	5.8	4.7	3.1	1.9	1.9
67.5°	1121.0	297.8	15.9	10.9	8.2	7.0	5.8	4.3	2.7	1.6	1.6
70°	952.7	208.3	12.4	8.6	7.0	6.2	4.7	3.1	1.6	0.8	0.8
72.5°	773.9	165.2	9.7	7.0	5.8	4.7	3.9	1.9	1.2	0.4	0.4
75°	547.3	101.5	8.6	6.2	4.7	3.5	3.1	1.9	1.2	0.8	0.4
77.5°	270.2	46.6	7.0	5.4	4.3	3.5	2.7	2.3	1.9	1.6	0.8
80°	79.3	15.2	4.7	3.9	3.9	3.5	3.1	2.7	2.3	1.9	1.2
82.5°	17.9	5.4	1.6	1.9	2.7	2.7	2.7	1.9	1.6	0.8	0.4
85°	2.3	1.2	1.2	1.2	1.6	1.6	1.2	0.8	0.8	0.0	0.0
87.5°	0.8	0.8	0.8	1.2	1.2	1.2	0.8	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

(END OF REPORT)