

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: P401082

Luminaire Tested: **ENT-SA1B-727-U-T2**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401082
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-11)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1B-727-U-T2
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 2700K, 450mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2853 lumens
Efficiency: N/A
Efficacy: 112.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G1

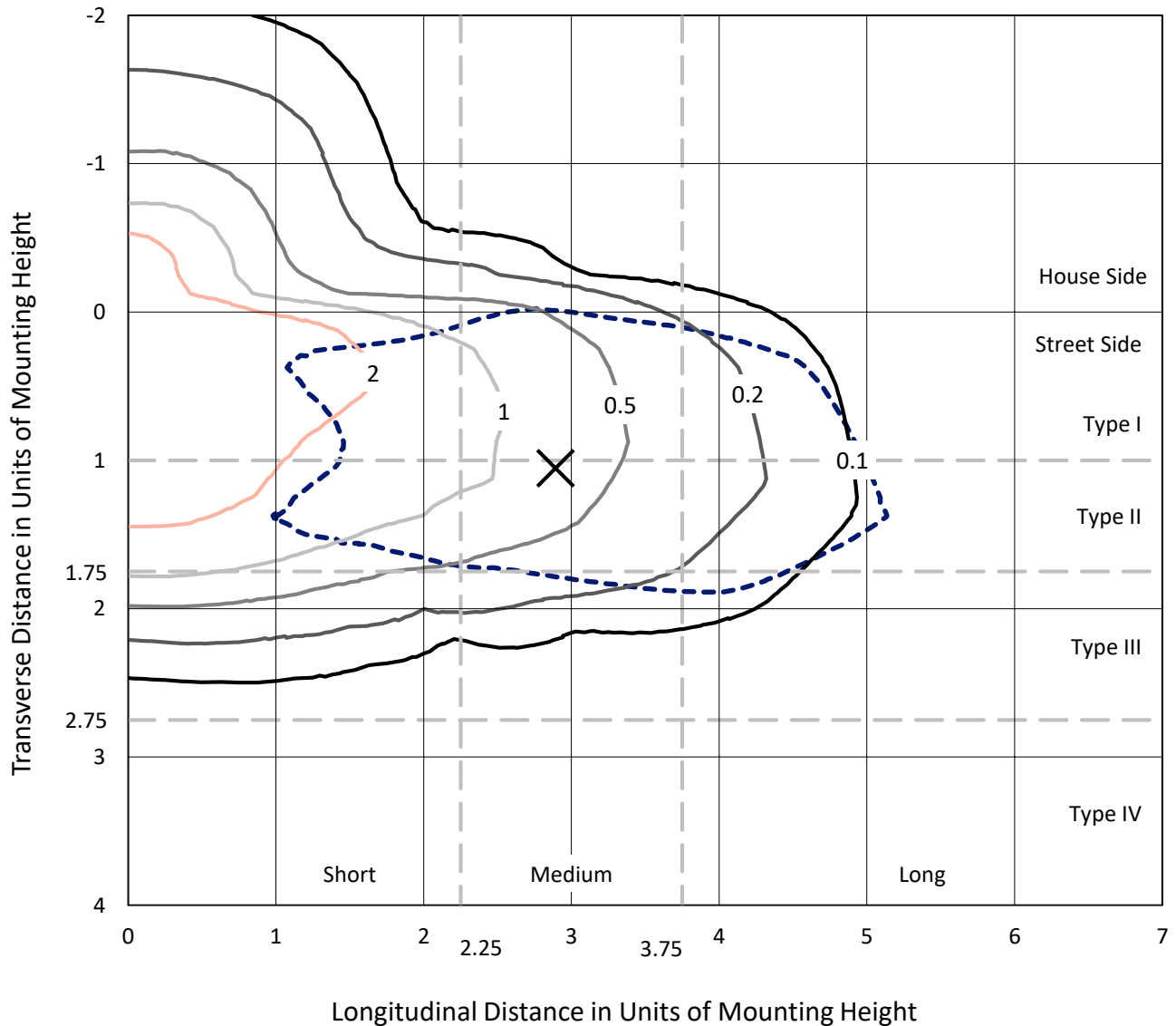
Input Watts (W): 25.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

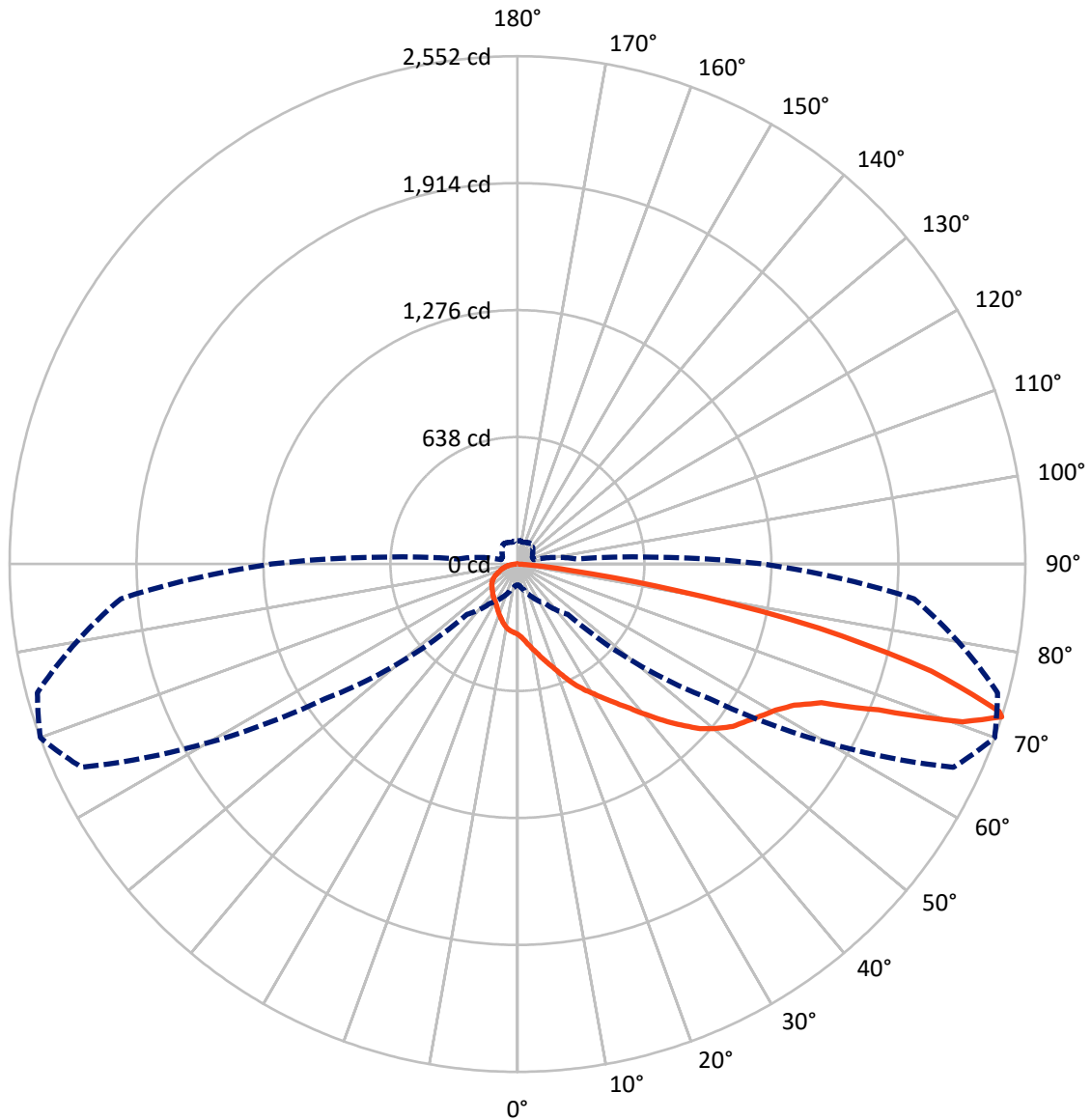
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.9 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	530.1	0.0	530.1
	% Fixture	18.6	0.0	18.6
Street Side	Lumens	2322.9	0.0	2322.9
	% Fixture	81.4	0.0	81.4
Total	Lumens	2853.0	0.0	2853.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.5	1.2
10°-20°	113.9	4.0
20°-30°	201.8	7.1
30°-40°	300.0	10.5
40°-50°	435.2	15.3
50°-60°	594.5	20.8
60°-70°	650.9	22.8
70°-80°	463.0	16.2
80°-90°	58.1	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°	2853.0	100.0
0°-180°	2853.0	100.0



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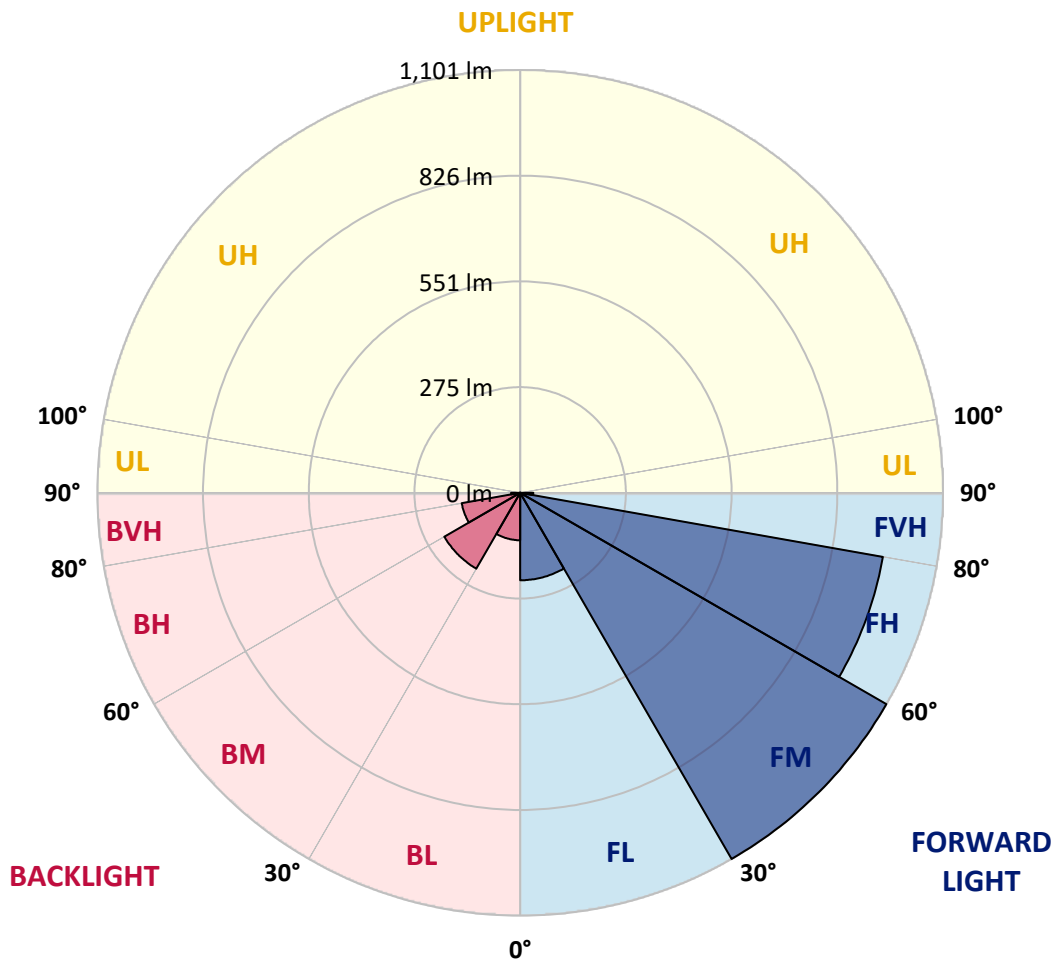
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	227.7	8.0			
FM (30°-60°)	1101.4	38.6			
FH (60°-80°)	959.4	33.6			G1/1800
FVH (80°-90°)	34.3	1.2			G1/100
BL (0°-30°)	123.5	4.3	B1/500		
BM (30°-60°)	228.2	8.0	B1/1000		
BH (60°-80°)	154.6	5.4	B1/500		G1/500
BVH (80°-90°)	23.8	0.8			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 Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	353.3	353.3	353.3	353.3	353.3	353.3	353.3	353.3	353.3	353.3	353.3
2.5°	392.9	390.8	391.2	387.6	385.5	380.6	375.3	369.6	366.8	364.7	357.8
5°	431.2	431.2	432.8	429.9	422.2	414.0	404.7	392.0	386.7	379.4	365.5
7.5°	462.9	463.8	463.8	462.9	456.0	447.1	434.8	419.3	410.8	400.2	378.6
10°	479.2	481.3	482.9	484.1	483.3	478.0	464.2	448.3	436.5	422.6	393.7
12.5°	487.4	488.2	491.1	497.2	502.1	506.1	496.0	477.2	465.4	448.7	410.0
15°	496.4	496.4	499.2	507.0	516.3	527.3	526.1	511.4	498.8	478.0	430.8
17.5°	502.1	503.7	509.0	517.1	530.2	548.5	557.9	549.8	533.4	511.4	453.2
20°	498.8	500.0	510.6	526.5	543.2	566.9	590.5	590.5	575.0	549.8	478.0
22.5°	504.9	507.0	514.3	529.4	552.2	582.8	621.5	634.9	621.5	593.8	507.0
25°	528.6	527.7	533.9	540.0	559.5	597.4	648.0	682.6	670.4	639.8	535.1
27.5°	562.8	562.8	566.1	565.6	572.6	609.7	671.2	724.6	714.4	677.7	558.3
30°	602.3	603.1	602.3	601.9	600.7	626.4	692.0	762.1	756.8	720.5	579.5
32.5°	650.4	652.4	649.2	641.0	636.1	650.4	709.5	804.0	805.7	762.9	600.3
35°	710.7	714.0	701.8	689.9	677.7	684.2	729.9	843.6	859.9	811.0	625.5
37.5°	771.0	776.3	774.3	742.5	725.4	725.0	760.0	892.9	920.2	873.7	661.4
40°	822.0	826.5	828.9	800.0	776.3	775.5	804.5	944.2	994.4	945.9	703.8
42.5°	855.8	859.9	867.2	850.1	828.1	838.3	853.4	995.2	1074.2	1033.9	756.0
45°	892.5	895.7	900.2	890.4	879.0	908.4	915.3	1051.8	1154.1	1128.4	817.1
47.5°	931.6	934.9	937.3	930.0	925.9	967.1	976.0	1109.7	1234.8	1226.2	876.6
50°	974.8	976.0	978.5	974.8	976.0	1020.4	1026.1	1160.6	1298.8	1328.1	938.5
52.5°	1049.0	1050.6	1051.4	1033.9	1027.8	1054.3	1066.5	1214.8	1355.0	1412.9	993.1
55°	1107.7	1113.4	1139.0	1127.6	1112.9	1078.3	1099.9	1258.4	1395.0	1491.9	1050.2
57.5°	1059.6	1072.6	1136.6	1190.4	1231.5	1148.8	1139.4	1303.3	1441.0	1560.0	1116.6
60°	919.8	938.9	1031.9	1143.9	1277.2	1310.6	1220.5	1359.1	1491.1	1630.9	1187.9
62.5°	637.8	657.3	785.7	964.6	1200.2	1403.1	1442.6	1458.1	1560.8	1703.5	1280.8
65°	305.6	325.6	431.6	620.3	947.9	1343.6	1701.4	1663.5	1678.2	1795.6	1417.8
67.5°	194.4	205.0	246.6	337.8	551.4	1046.5	1794.3	2072.7	1956.1	2007.9	1690.4
70°	142.2	144.7	180.5	233.9	327.2	611.3	1584.5	2464.3	2373.0	2367.3	2019.3
72°	105.1	109.2	136.9	186.6	242.1	357.4	1179.0	2416.6	2551.5	2497.3	1999.7
72.5°	99.0	102.3	126.3	176.5	228.6	313.8	1056.3	2361.2	2529.5	2501.0	1962.2
75°	72.1	74.6	86.4	125.5	176.9	181.8	564.0	1812.3	2148.1	2387.7	1778.8
77.5°	49.7	51.3	57.5	77.0	121.0	123.1	239.2	1237.2	1550.2	1909.3	1368.1
80°	30.2	31.0	34.6	42.0	77.0	72.9	98.6	646.7	808.9	1038.0	634.5
82.5°	12.6	13.0	15.1	16.7	32.6	34.6	39.9	211.1	267.7	324.4	183.0
85°	0.0	0.0	0.4	0.4	0.8	3.7	5.7	26.1	39.5	47.3	33.0
87.5°	0.0	0.0	0.4	0.4	0.4	0.8	0.8	1.2	1.6	1.6	2.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	353.3	353.3	353.3	353.3	353.3	353.3	353.3	353.3	353.3	353.3	353.3
2.5°	354.5	352.9	348.0	344.0	340.7	335.4	335.0	330.9	330.9	329.7	328.9
5°	360.3	355.0	345.2	336.2	329.7	321.9	318.3	313.8	310.9	309.3	309.7
7.5°	367.6	358.6	341.9	326.8	314.6	304.8	299.1	295.5	293.4	292.6	292.6
10°	377.8	363.9	336.6	313.8	298.3	291.0	288.1	287.7	288.1	288.5	288.9
12.5°	389.2	367.6	326.8	298.3	286.1	283.2	284.9	288.5	291.8	293.0	293.0
15°	401.0	370.0	313.4	284.0	276.7	279.6	285.3	292.2	297.5	300.8	301.6
17.5°	413.2	370.4	299.1	271.0	268.6	275.9	286.1	297.1	305.6	310.9	311.8
20°	426.3	369.6	282.4	259.2	260.4	272.6	286.9	302.0	313.4	320.3	321.1
22.5°	440.5	366.4	266.1	247.8	253.5	269.4	286.1	303.6	315.8	324.0	325.6
25°	454.4	359.8	249.8	237.6	248.6	266.1	282.0	297.1	308.9	316.6	318.7
27.5°	461.7	346.0	234.3	229.8	244.9	261.2	272.6	282.8	289.3	294.2	296.3
30°	462.9	326.4	221.7	224.5	240.8	254.3	260.8	262.4	261.2	262.9	260.8
32.5°	460.5	305.2	211.5	220.5	234.3	244.5	246.1	241.3	233.9	223.7	224.1
35°	458.9	282.0	203.4	214.8	225.8	232.3	229.4	221.7	207.8	195.6	194.8
37.5°	461.7	260.8	196.4	207.4	214.8	217.6	213.5	203.4	191.1	180.5	179.3
40°	469.9	245.3	189.9	199.3	202.9	205.0	200.1	191.1	186.2	178.5	177.3
42.5°	485.8	234.7	183.8	190.3	191.9	194.0	189.1	183.0	187.5	185.8	185.8
45°	507.8	229.8	178.5	181.8	183.4	186.6	183.8	178.5	183.4	174.0	172.4
47.5°	536.3	231.5	174.8	173.2	178.1	183.8	180.5	174.0	172.4	155.7	152.8
50°	566.5	240.0	171.2	166.3	172.4	180.1	176.1	165.9	156.1	147.5	145.9
52.5°	601.9	254.3	167.9	158.5	165.9	176.1	173.2	162.2	152.0	145.9	144.7
55°	641.0	268.2	163.8	149.6	157.3	174.8	174.0	159.7	146.3	143.4	142.6
57.5°	685.0	279.6	158.9	139.4	148.7	171.2	170.3	154.0	144.7	142.2	141.8
60°	740.1	293.0	150.4	127.6	140.2	164.2	163.4	151.2	141.0	139.0	138.2
62.5°	815.0	317.9	135.7	116.6	131.2	152.0	156.9	145.5	135.7	135.3	135.3
65°	938.5	366.0	120.6	107.2	121.0	140.2	148.3	139.0	130.8	132.9	132.9
67.5°	1172.0	430.8	105.1	98.2	111.3	128.8	141.0	132.4	125.5	129.6	129.6
70°	1352.2	406.7	92.9	89.7	101.5	118.6	131.6	125.5	119.0	125.9	125.1
72°	1233.6	297.9	84.8	82.7	93.3	110.0	123.5	119.0	112.1	117.8	116.1
72.5°	1184.3	270.6	82.3	80.7	90.9	108.4	121.8	117.4	110.0	115.7	113.3
75°	1033.1	228.2	71.7	70.9	80.7	97.4	111.3	108.8	101.5	104.7	102.3
77.5°	855.0	192.4	60.3	61.9	68.9	86.8	100.3	97.8	90.9	90.5	90.1
80°	401.0	107.2	49.7	50.9	57.9	74.2	86.4	84.8	78.2	77.4	76.2
82.5°	116.1	51.3	38.3	39.1	46.5	60.7	74.2	73.4	68.5	67.2	64.4
85°	21.6	16.7	20.8	24.5	33.8	50.5	67.6	66.0	58.7	53.4	49.3
87.5°	1.2	3.3	6.9	11.8	21.6	37.9	54.6	53.4	46.9	40.3	40.8
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)