

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: P401754

Luminaire Tested: **ENT-SA1E-827-U-T4W**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401754
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-17)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1E-827-U-T4W
Description: ENTRI LED LUMINAIRE
(1) 80 CRI, 2700K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5171 lumens
Efficiency: N/A
Efficacy: 90.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 57.2
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

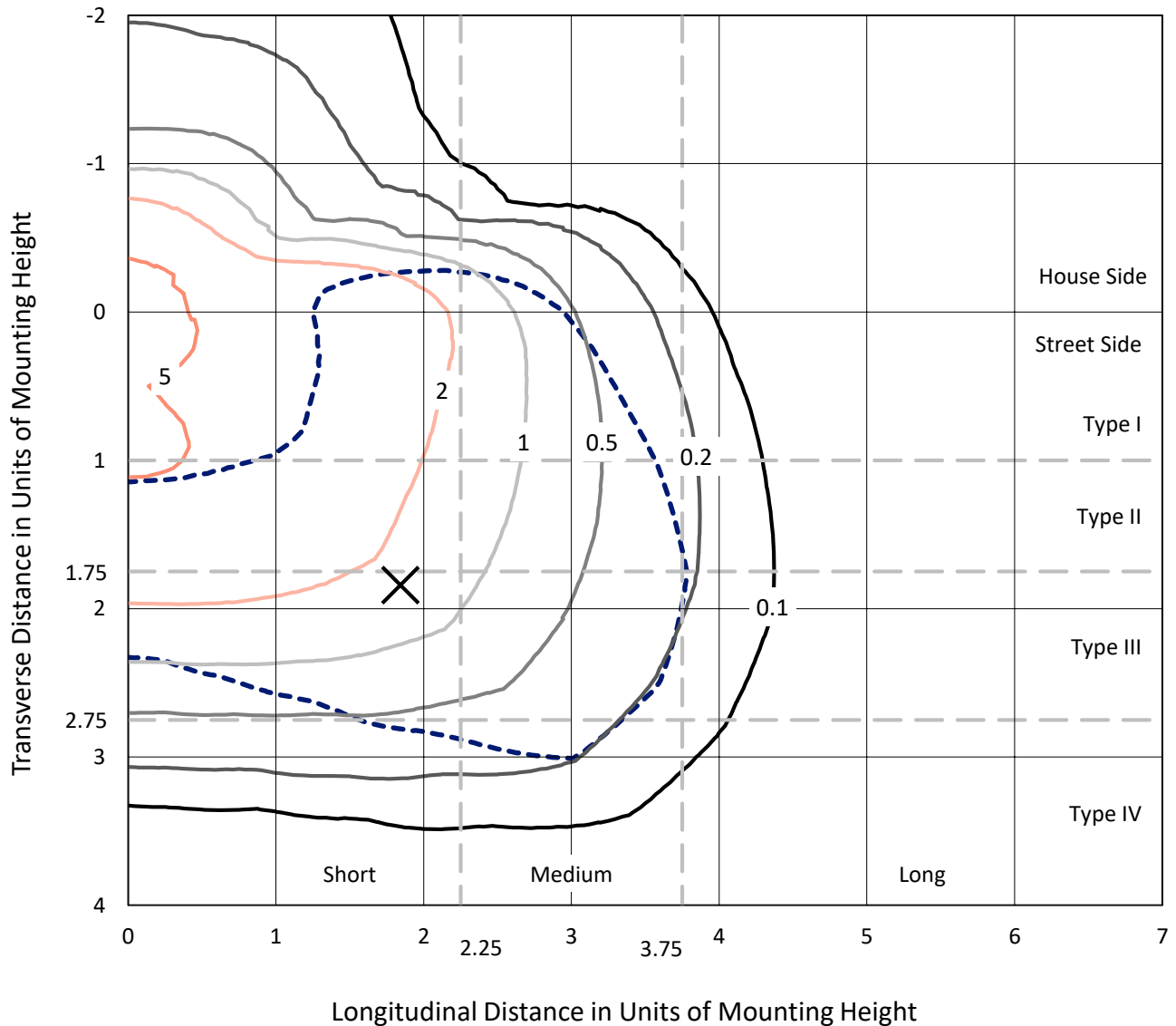


REPORT NUMBER: P401754

CATALOG NUMBER: ENT-SA1E-827-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

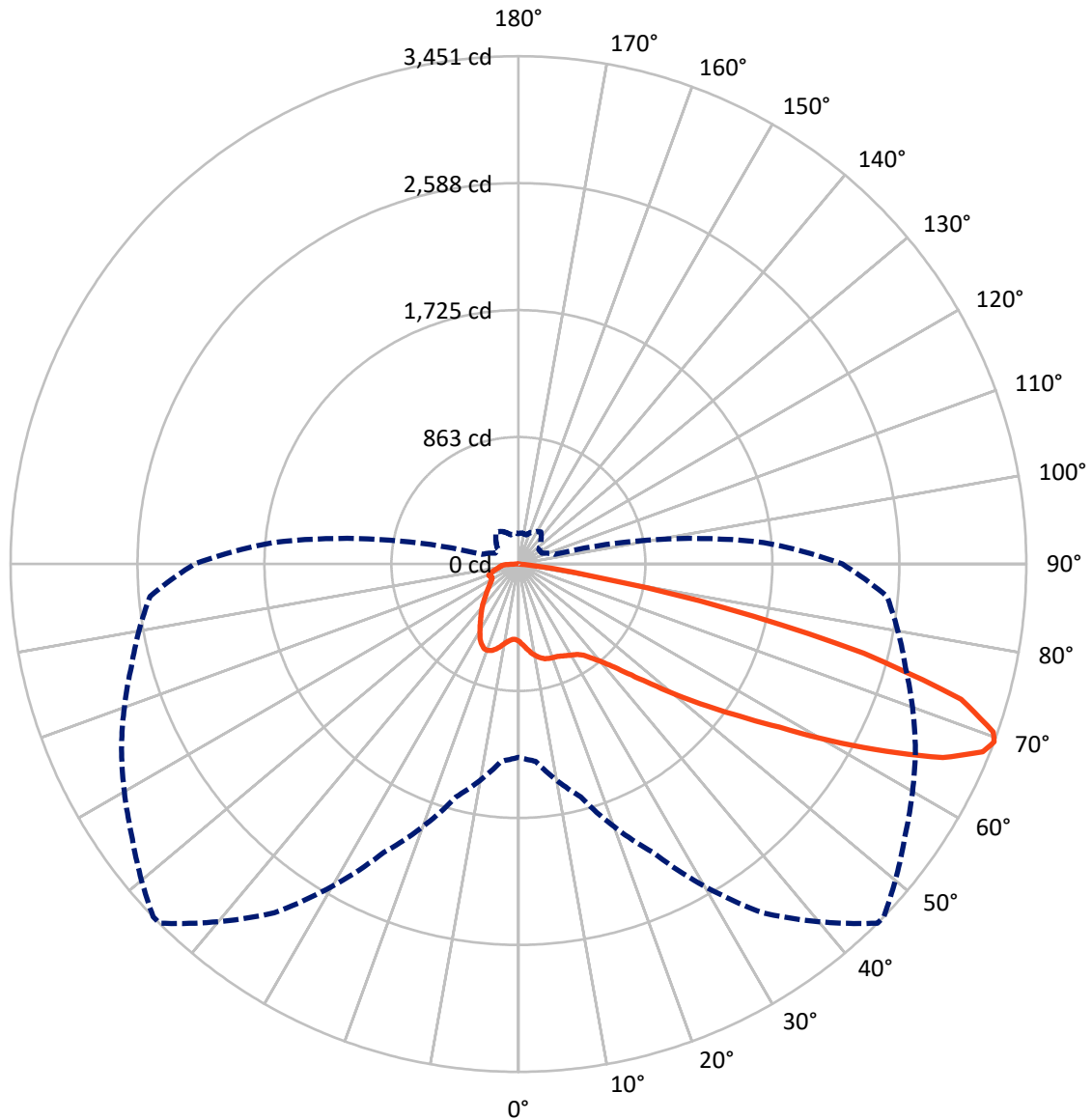


Based on 10 foot mounting height. Maximum calculated value = 6.4 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P401754

CATALOG NUMBER: ENT-SA1E-827-U-T4W

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P401754

CATALOG NUMBER: ENT-SA1E-827-U-T4W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1217.4	0.0	1217.4
	% Fixture	23.5	0.0	23.5
Street Side	Lumens	3953.6	0.0	3953.6
	% Fixture	76.5	0.0	76.5
Total	Lumens	5171.0	0.0	5171.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.4	1.0
10°-20°	177.2	3.4
20°-30°	299.5	5.8
30°-40°	433.3	8.4
40°-50°	654.2	12.7
50°-60°	1103.2	21.3
60°-70°	1517.7	29.3
70°-80°	841.0	16.3
80°-90°	91.6	1.8
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°	5171.0	100.0
0°-180°	5171.0	100.0

Coefficient of Utilization



REPORT NUMBER: P401754

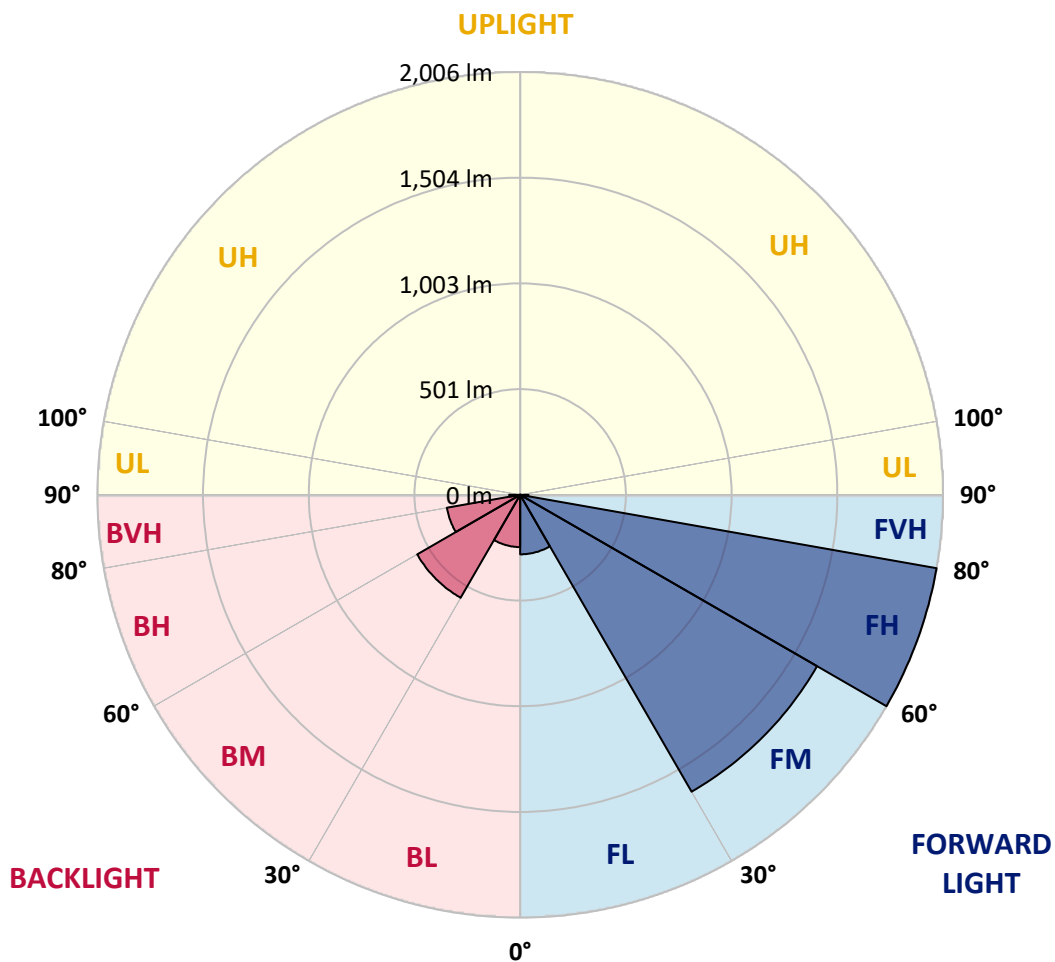
CATALOG NUMBER: ENT-SA1E-827-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	282.2	5.5			
FM	(30°-60°)	1626.3	31.5			
FH	(60°-80°)	2005.8	38.8			G2/5000
FVH	(80°-90°)	39.2	0.8			G1/100
BL	(0°-30°)	247.9	4.8	B1/500		
BM	(30°-60°)	564.3	10.9	B1/1000		
BH	(60°-80°)	352.9	6.8	B1/500		G1/500
BVH	(80°-90°)	52.4	1.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short





REPORT NUMBER: P401754

CATALOG NUMBER: ENT-SA1E-827-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	524.9	524.9	524.9	524.9	524.9	524.9	524.9	524.9	524.9	524.9	524.9
2.5°	557.9	557.2	557.9	555.0	552.1	547.7	546.2	541.0	537.4	532.2	527.8
5°	599.1	601.3	600.6	596.9	585.1	576.3	576.3	565.3	553.5	542.5	532.2
7.5°	644.0	644.0	639.5	632.2	620.4	607.2	605.7	591.0	574.1	558.7	542.5
10°	676.3	677.8	671.2	660.9	646.2	632.2	630.7	613.8	597.6	577.8	557.9
12.5°	699.1	699.1	693.2	683.7	666.0	652.8	651.3	635.9	619.0	598.4	575.6
15°	710.9	709.4	704.2	693.9	678.5	667.5	665.3	652.0	638.1	617.5	593.2
17.5°	708.6	708.6	704.2	693.9	682.9	674.1	672.6	663.1	652.8	632.9	608.7
20°	699.1	698.4	696.9	688.8	681.4	677.8	676.3	671.9	665.3	648.4	625.6
22.5°	690.3	689.5	687.3	682.2	679.2	681.4	681.4	680.7	680.0	666.7	644.7
25°	695.4	694.7	690.3	682.9	682.2	692.5	693.2	695.4	696.9	685.9	663.1
27.5°	731.4	729.2	716.7	697.6	691.0	704.2	705.7	712.3	710.9	699.1	679.2
30°	802.0	802.7	774.8	733.6	711.6	717.5	718.2	725.6	723.3	713.8	697.6
32.5°	908.6	908.6	863.0	800.5	744.7	732.9	730.7	737.3	746.1	733.6	717.5
35°	1043.9	1040.2	985.0	888.7	801.3	759.4	757.9	755.0	770.4	758.6	735.1
37.5°	1179.9	1166.6	1113.0	1007.1	880.7	810.8	804.9	796.1	804.9	780.0	759.4
40°	1289.4	1287.2	1243.1	1135.7	974.8	873.3	868.9	829.9	835.8	816.0	807.9
42.5°	1409.9	1411.4	1382.0	1273.9	1087.2	957.8	946.1	885.8	902.7	895.4	891.7
45°	1542.3	1540.8	1518.7	1405.5	1224.7	1075.5	1060.8	986.5	1021.1	1016.7	1037.2
47.5°	1643.7	1651.8	1639.3	1559.2	1387.9	1218.1	1207.1	1116.6	1168.8	1204.1	1243.1
50°	1781.9	1781.2	1747.4	1714.3	1577.5	1400.4	1389.4	1288.6	1363.6	1415.1	1486.4
52.5°	1953.2	1947.3	1877.5	1865.7	1808.4	1599.6	1590.0	1484.9	1592.2	1637.1	1781.9
55°	2060.5	2059.8	2023.8	2044.3	2045.8	1821.6	1809.8	1716.5	1837.8	1889.2	2108.3
57.5°	2150.2	2150.9	2181.1	2253.1	2301.6	2091.4	2087.0	1973.0	2095.8	2167.8	2426.6
60°	2219.3	2234.0	2318.5	2483.2	2564.1	2435.4	2416.3	2295.7	2378.1	2406.8	2669.9
62.5°	2191.4	2210.5	2376.6	2619.2	2827.2	2800.0	2793.4	2619.2	2618.5	2603.8	2851.5
65°	1970.8	2012.0	2273.7	2614.1	3000.7	3170.5	3161.0	2924.3	2841.9	2768.4	2905.9
67.5°	1612.8	1621.7	1937.0	2414.1	2999.2	3403.6	3393.3	3146.3	2980.9	2800.8	2746.4
69°	1312.9	1345.3	1637.1	2161.2	2893.4	3450.6	3450.6	3208.0	2975.7	2723.6	2512.6
70°	1135.7	1137.2	1418.8	1959.8	2749.3	3422.7	3429.3	3208.0	2933.8	2622.9	2305.3
72.5°	532.2	565.3	743.2	1279.1	2220.8	3146.3	3162.4	2996.3	2690.5	2259.7	1729.7
75°	159.5	165.4	247.7	606.5	1272.5	2423.7	2459.7	2492.8	2191.4	1663.6	1065.2
77.5°	94.8	94.1	119.8	205.8	588.8	1437.1	1453.3	1594.5	1421.7	924.8	483.7
80°	46.3	47.8	64.0	100.0	220.5	521.9	574.1	745.4	630.0	361.7	177.2
82.5°	15.4	16.9	26.5	40.4	93.4	168.3	186.0	233.8	201.4	131.6	75.7
85°	0.0	0.0	0.7	1.5	5.1	12.5	12.5	27.9	41.9	46.3	25.0
87.5°	0.0	0.0	0.7	0.7	1.5	1.5	1.5	1.5	1.5	1.5	2.2
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: P401754

CATALOG NUMBER: ENT-SA1E-827-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	524.9	524.9	524.9	524.9	524.9	524.9	524.9	524.9	524.9	524.9	524.9
2.5°	525.6	524.1	521.2	518.3	516.8	513.1	513.8	512.4	511.6	511.6	512.4
5°	527.1	524.9	520.5	517.5	514.6	513.1	516.8	518.3	519.7	519.7	520.5
7.5°	535.9	531.5	526.3	522.7	523.4	525.6	531.5	535.9	538.1	539.6	541.0
10°	550.6	545.5	538.1	537.4	538.8	544.7	552.8	559.4	565.3	569.0	569.0
12.5°	566.0	559.4	553.5	555.0	561.6	570.4	578.5	585.9	591.0	594.7	595.4
15°	582.9	576.3	570.4	574.1	585.1	595.4	602.8	605.7	607.9	611.6	612.3
17.5°	598.4	592.5	587.4	596.9	606.5	614.6	616.8	615.3	612.3	614.6	616.0
20°	614.6	609.4	606.5	616.8	623.4	624.1	618.2	611.6	604.3	604.3	605.0
22.5°	634.4	627.8	626.3	631.5	629.3	620.4	605.7	595.4	585.1	583.7	585.9
25°	653.5	646.9	646.2	642.5	623.4	600.6	580.7	569.0	560.9	561.6	566.0
27.5°	672.6	668.2	669.0	649.1	606.5	571.9	545.5	535.9	538.1	539.6	544.0
30°	691.7	691.7	694.7	649.1	582.9	531.5	506.5	505.8	511.6	516.0	521.2
32.5°	713.8	720.4	715.3	641.0	551.3	490.3	470.5	471.9	478.6	485.9	490.3
35°	735.1	750.5	735.8	622.6	508.0	452.8	436.7	434.5	439.6	446.2	448.4
37.5°	768.9	793.9	753.5	594.0	463.1	419.7	403.6	397.7	392.5	397.7	397.0
40°	827.7	857.9	766.7	546.2	419.7	388.9	372.0	360.9	348.4	337.4	337.4
42.5°	921.8	941.7	774.1	488.1	376.4	358.0	341.1	324.9	305.8	286.0	286.0
45°	1075.5	1079.9	777.0	426.4	336.7	327.1	309.5	294.0	269.1	249.2	244.8
47.5°	1280.6	1261.4	784.4	366.8	302.1	299.9	285.2	267.6	240.4	222.0	219.8
50°	1556.2	1473.9	816.7	319.0	274.2	276.4	265.4	244.8	219.1	205.8	202.9
52.5°	1866.4	1742.2	841.7	280.8	249.9	256.6	248.5	228.6	206.6	195.5	193.3
55°	2205.3	2000.2	835.8	255.1	231.6	238.9	236.0	219.1	199.2	189.7	187.5
57.5°	2481.7	2181.8	784.4	232.3	213.2	223.5	226.4	213.2	194.8	186.0	183.8
60°	2689.0	2281.0	678.5	213.2	198.5	211.0	219.1	209.5	194.1	188.9	186.7
62.5°	2783.1	2272.2	541.0	198.5	187.5	202.2	219.8	215.4	205.1	208.8	209.5
65°	2730.2	2161.2	405.8	187.5	180.8	203.6	232.3	232.3	216.9	223.5	224.2
67.5°	2458.9	1870.9	295.5	179.4	174.2	211.0	255.8	241.1	211.7	216.9	214.7
69°	2200.9	1673.8	253.6	175.0	169.1	214.7	266.1	242.6	205.8	211.7	205.8
70°	2011.3	1495.9	227.9	171.3	166.9	214.7	269.1	241.1	202.9	207.3	200.7
72.5°	1431.3	1038.7	187.5	163.9	158.8	198.5	263.9	233.0	194.8	189.7	177.2
75°	832.1	574.1	159.5	155.8	140.4	174.2	250.7	224.2	186.7	177.2	168.3
77.5°	349.2	256.6	136.0	141.9	124.2	155.1	234.5	215.4	177.2	163.9	159.5
80°	141.9	127.9	113.2	122.8	108.1	136.7	216.1	200.7	163.2	150.0	143.3
82.5°	74.2	70.6	86.7	99.2	89.7	125.7	203.6	190.4	151.4	138.2	130.1
85°	22.1	29.4	49.3	67.6	68.4	113.2	197.7	176.4	131.6	113.9	112.5
87.5°	1.5	5.9	16.9	35.3	44.8	86.7	160.3	144.8	106.6	89.7	90.4
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)