

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: P401478

Luminaire Tested: **ENT-SA1D-735-U-T2**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401478
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-SA1D-735-U-T2
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3500K, 800mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5279 lumens
Efficiency: N/A
Efficacy: 122.5 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

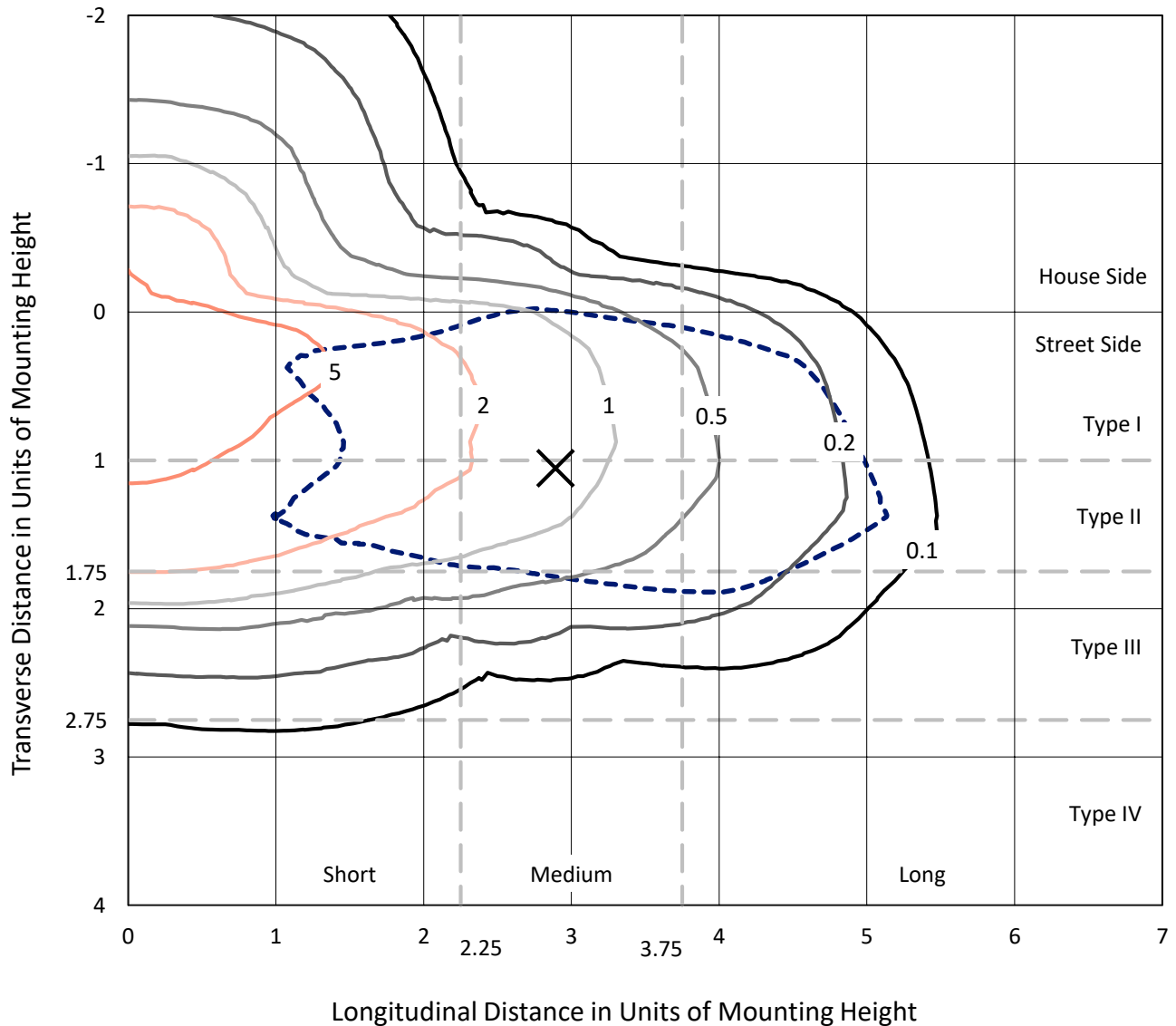
Input Watts (W): 43.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

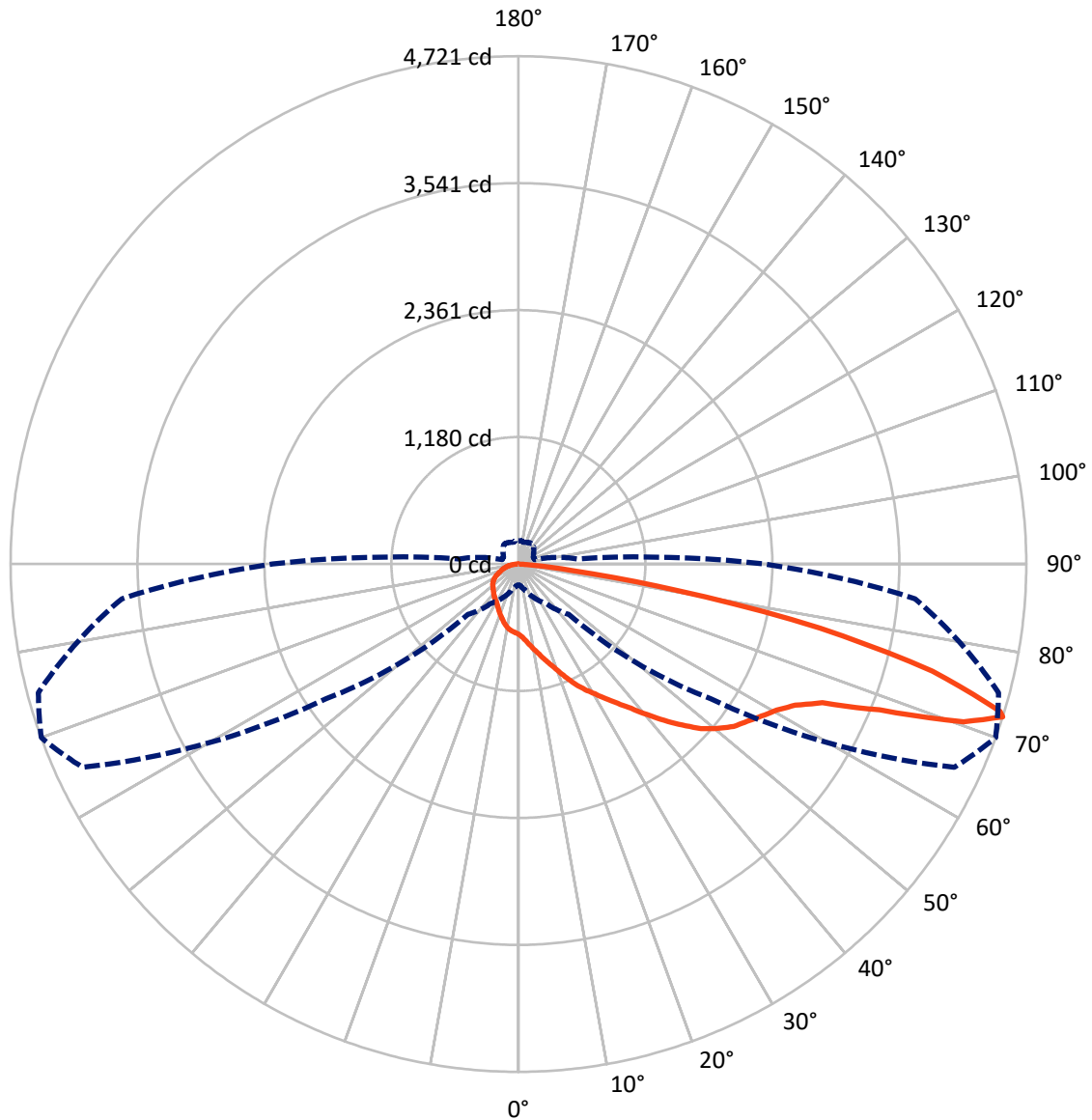
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.1 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	980.9	0.0	980.9
	% Fixture	18.6	0.0	18.6
Street Side	Lumens	4298.1	0.0	4298.1
	% Fixture	81.4	0.0	81.4
Total	Lumens	5279.0	0.0	5279.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.7	1.2
10°-20°	210.8	4.0
20°-30°	373.3	7.1
30°-40°	555.0	10.5
40°-50°	805.2	15.3
50°-60°	1100.1	20.8
60°-70°	1204.5	22.8
70°-80°	856.7	16.2
80°-90°	107.6	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°	5279.0	100.0
0°-180°	5279.0	100.0



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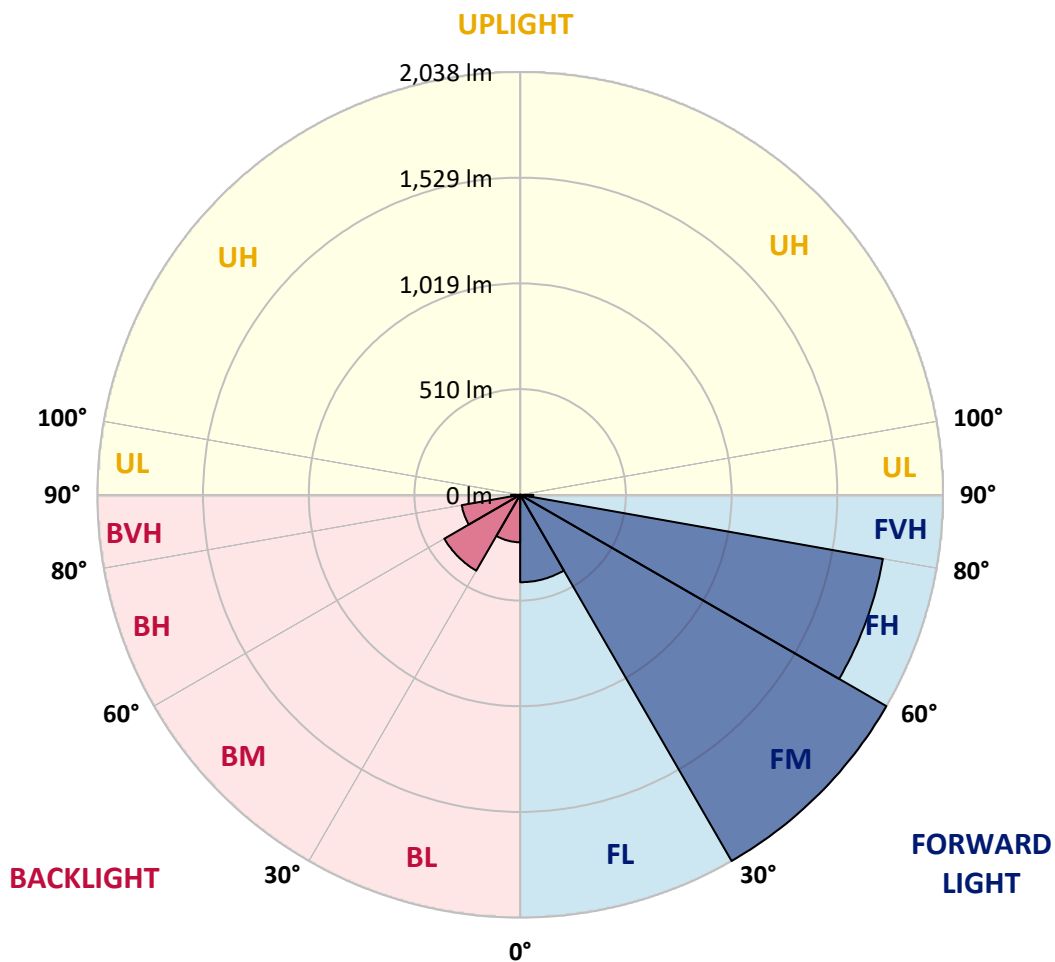
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	421.3	8.0			
FM	(30°-60°)	2038.0	38.6			
FH	(60°-80°)	1775.2	33.6			G1/1800
FVH	(80°-90°)	63.5	1.2			G1/100
BL	(0°-30°)	228.6	4.3	B1/500		
BM	(30°-60°)	422.3	8.0	B1/1000		
BH	(60°-80°)	286.0	5.4	B1/500		G1/500
BVH	(80°-90°)	44.0	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°	653.8	653.8	653.8	653.8	653.8	653.8	653.8	653.8	653.8	653.8	653.8
2.5°	726.9	723.1	723.9	717.1	713.3	704.3	694.5	683.9	678.7	674.9	662.1
5°	797.8	797.8	800.8	795.5	781.2	766.1	748.8	725.4	715.6	702.0	676.4
7.5°	856.6	858.1	858.1	856.6	843.8	827.2	804.6	775.9	760.1	740.5	700.5
10°	886.8	890.5	893.6	895.8	894.3	884.5	858.9	829.5	807.6	782.0	728.4
12.5°	901.9	903.4	908.6	919.9	929.0	936.5	917.7	883.0	861.1	830.2	758.6
15°	918.4	918.4	923.7	938.0	955.4	975.7	973.5	946.3	923.0	884.5	797.0
17.5°	929.0	932.0	941.8	956.9	981.0	1015.0	1032.3	1017.2	987.1	946.3	838.5
20°	923.0	925.2	944.8	974.2	1005.2	1048.9	1092.6	1092.6	1064.0	1017.2	884.5
22.5°	934.3	938.0	951.6	979.5	1021.7	1078.3	1149.9	1174.8	1149.9	1098.7	938.0
25°	978.0	976.5	987.8	999.1	1035.3	1105.4	1198.9	1263.0	1240.4	1183.9	990.1
27.5°	1041.4	1041.4	1047.4	1046.6	1059.4	1128.1	1241.9	1340.7	1321.9	1254.0	1033.1
30°	1114.5	1116.0	1114.5	1113.7	1111.5	1159.0	1280.4	1410.1	1400.3	1333.2	1072.3
32.5°	1203.5	1207.2	1201.2	1186.1	1177.1	1203.5	1312.8	1487.8	1490.8	1411.6	1110.7
35°	1315.1	1321.1	1298.5	1276.6	1254.0	1266.1	1350.5	1560.9	1591.1	1500.6	1157.5
37.5°	1426.7	1436.5	1432.7	1373.9	1342.2	1341.5	1406.3	1652.1	1702.7	1616.7	1223.8
40°	1520.9	1529.2	1533.7	1480.2	1436.5	1435.0	1488.5	1747.1	1839.9	1750.2	1302.3
42.5°	1583.5	1591.1	1604.6	1573.0	1532.2	1551.1	1579.0	1841.4	1987.7	1913.0	1398.8
45°	1651.4	1657.4	1665.7	1647.6	1626.5	1680.8	1693.6	1946.2	2135.5	2088.0	1511.9
47.5°	1723.8	1729.8	1734.3	1720.8	1713.2	1789.4	1806.0	2053.3	2284.8	2269.0	1622.0
50°	1803.7	1806.0	1810.5	1803.7	1806.0	1888.2	1898.7	2147.6	2403.2	2457.5	1736.6
52.5°	1940.9	1944.0	1945.5	1913.0	1901.7	1950.7	1973.4	2247.8	2507.2	2614.3	1837.6
55°	2049.5	2060.1	2107.6	2086.5	2059.3	1995.2	2035.2	2328.5	2581.1	2760.6	1943.2
57.5°	1960.5	1984.7	2103.1	2202.6	2278.8	2125.7	2108.3	2411.5	2666.3	2886.5	2066.1
60°	1701.9	1737.3	1909.3	2116.6	2363.2	2425.0	2258.4	2514.8	2759.1	3017.7	2198.1
62.5°	1180.1	1216.3	1453.8	1784.9	2220.7	2596.2	2669.4	2698.0	2888.0	3152.0	2370.0
65°	565.5	602.5	798.5	1147.7	1753.9	2486.1	3148.2	3078.1	3105.2	3322.4	2623.4
67.5°	359.7	379.3	456.2	625.1	1020.2	1936.4	3320.1	3835.1	3619.5	3715.2	3127.8
70°	263.2	267.7	334.0	432.8	605.5	1131.1	2931.8	4559.8	4390.9	4380.3	3736.3
72°	194.5	202.1	253.4	345.4	447.9	661.3	2181.5	4471.6	4721.1	4620.9	3700.2
72.5°	183.2	189.3	233.8	326.5	423.0	580.6	1954.5	4369.0	4680.4	4627.6	3630.8
75°	133.5	138.0	159.9	232.2	327.3	336.3	1043.6	3353.3	3974.6	4418.0	3291.5
77.5°	92.0	95.0	106.3	142.5	224.0	227.7	442.6	2289.3	2868.4	3532.8	2531.4
80°	55.8	57.3	64.1	77.7	142.5	135.0	182.5	1196.7	1496.8	1920.6	1174.1
82.5°	23.4	24.1	27.9	30.9	60.3	64.1	73.9	390.6	495.4	600.2	338.6
85°	0.0	0.0	0.8	0.8	1.5	6.8	10.6	48.3	73.1	87.5	61.1
87.5°	0.0	0.0	0.8	0.8	0.8	1.5	1.5	2.3	3.0	3.0	4.5
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°	653.8	653.8	653.8	653.8	653.8	653.8	653.8	653.8	653.8	653.8	653.8
2.5°	656.0	653.0	644.0	636.4	630.4	620.6	619.8	612.3	612.3	610.0	608.5
5°	666.6	656.8	638.7	622.1	610.0	595.7	588.9	580.6	575.3	572.3	573.1
7.5°	680.2	663.6	632.7	604.8	582.1	564.0	553.5	546.7	542.9	541.4	541.4
10°	699.0	673.4	622.9	580.6	552.0	538.4	533.1	532.4	533.1	533.9	534.6
12.5°	720.1	680.2	604.8	552.0	529.3	524.1	527.1	533.9	539.9	542.2	542.2
15°	742.0	684.7	579.9	525.6	512.0	517.3	527.8	540.7	550.5	556.5	558.0
17.5°	764.6	685.4	553.5	501.4	496.9	510.5	529.3	549.7	565.5	575.3	576.9
20°	788.7	683.9	522.6	479.6	481.8	504.5	530.9	558.8	579.9	592.7	594.2
22.5°	815.1	677.9	492.4	458.5	469.0	498.4	529.3	561.8	584.4	599.5	602.5
25°	840.8	665.8	462.2	439.6	460.0	492.4	521.8	549.7	571.6	585.9	589.7
27.5°	854.3	640.2	433.6	425.3	453.2	483.3	504.5	523.3	535.4	544.4	548.2
30°	856.6	604.0	410.2	415.5	445.6	470.5	482.6	485.6	483.3	486.4	482.6
32.5°	852.1	564.8	391.4	407.9	433.6	452.4	455.4	446.4	432.8	414.0	414.7
35°	849.1	521.8	376.3	397.4	417.7	429.8	424.5	410.2	384.6	361.9	360.4
37.5°	854.3	482.6	363.5	383.8	397.4	402.7	395.1	376.3	353.7	334.0	331.8
40°	869.4	453.9	351.4	368.7	375.5	379.3	370.2	353.7	344.6	330.3	328.0
42.5°	898.8	434.3	340.1	352.1	355.2	358.9	349.9	338.6	346.9	343.8	343.8
45°	939.6	425.3	330.3	336.3	339.3	345.4	340.1	330.3	339.3	322.0	319.0
47.5°	992.3	428.3	323.5	320.5	329.5	340.1	334.0	322.0	319.0	288.0	282.8
50°	1048.1	444.1	316.7	307.7	319.0	333.3	325.8	306.9	288.8	273.0	270.0
52.5°	1113.7	470.5	310.7	293.3	306.9	325.8	320.5	300.1	281.3	270.0	267.7
55°	1186.1	496.2	303.1	276.7	291.1	323.5	322.0	295.6	270.7	265.4	263.9
57.5°	1267.6	517.3	294.1	257.9	275.2	316.7	315.2	285.0	267.7	263.2	262.4
60°	1369.4	542.2	278.2	236.0	259.4	303.9	302.4	279.8	260.9	257.1	255.6
62.5°	1508.1	588.2	251.1	215.7	242.8	281.3	290.3	269.2	251.1	250.3	250.3
65°	1736.6	677.1	223.2	198.3	224.0	259.4	274.5	257.1	242.1	245.8	245.8
67.5°	2168.7	797.0	194.5	181.7	205.9	238.3	260.9	245.1	232.2	239.8	239.8
70°	2502.0	752.5	171.9	165.9	187.8	219.4	243.6	232.2	220.2	233.0	231.5
72°	2282.5	551.2	156.8	153.1	172.7	203.6	228.5	220.2	207.4	217.9	214.9
72.5°	2191.3	500.7	152.3	149.3	168.2	200.6	225.5	217.2	203.6	214.2	209.6
75°	1911.5	422.3	132.7	131.2	149.3	180.2	205.9	201.3	187.8	193.8	189.3
77.5°	1582.0	355.9	111.6	114.6	127.4	160.6	185.5	181.0	168.2	167.4	166.6
80°	742.0	198.3	92.0	94.3	107.1	137.2	159.9	156.8	144.8	143.3	141.0
82.5°	214.9	95.0	70.9	72.4	86.0	112.4	137.2	135.7	126.7	124.4	119.1
85°	40.0	30.9	38.5	45.2	62.6	93.5	125.2	122.2	108.6	98.8	91.2
87.5°	2.3	6.0	12.8	21.9	40.0	70.1	101.0	98.8	86.7	74.7	75.4
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)