

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: P596702

Luminaire Tested: **MSA-SA3C-827-U-SL3**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596702
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-18)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA3C-827-U-SL3
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13132 lumens
Efficiency: N/A
Efficacy: 79.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

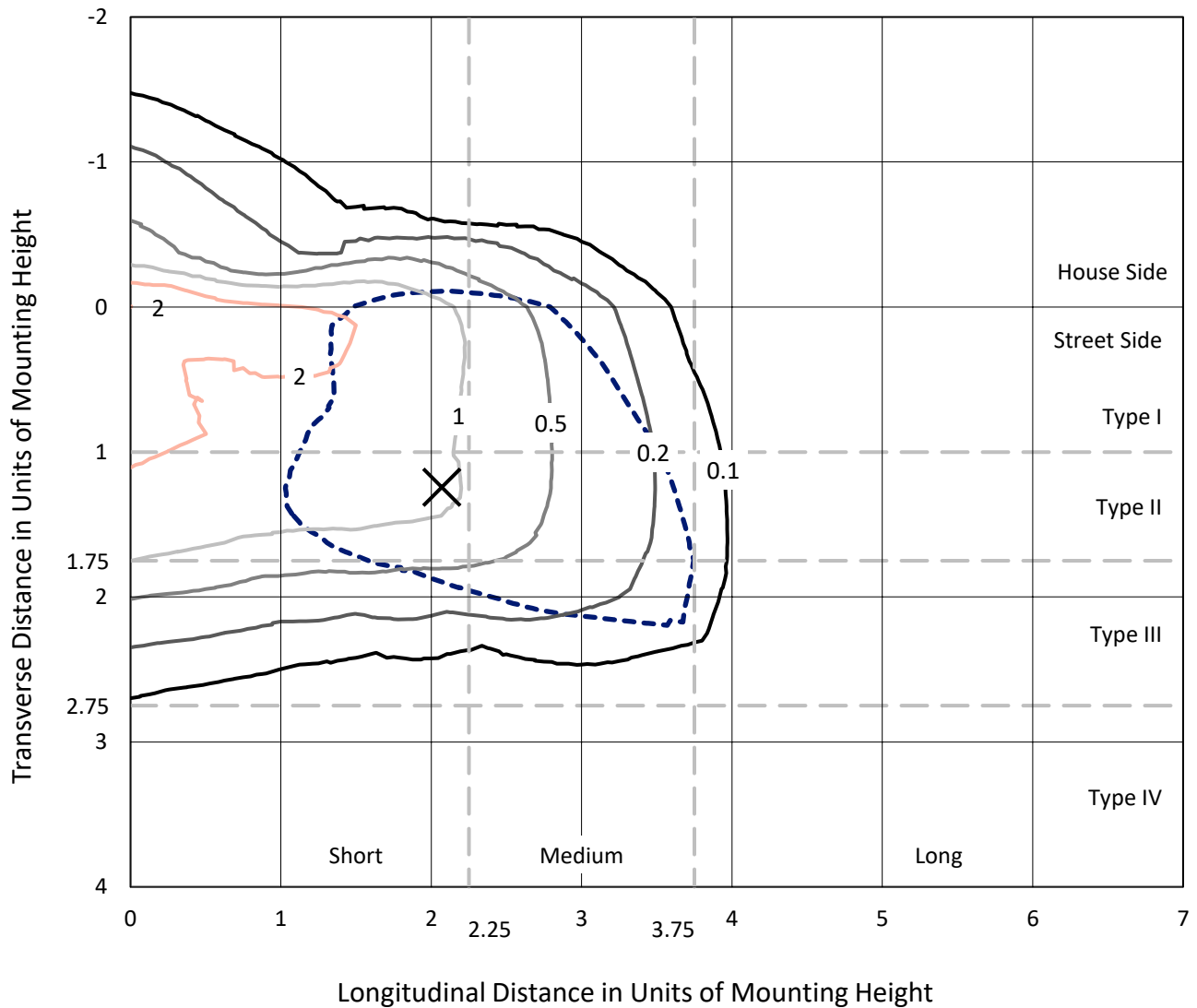
Input Watts (W): 166
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P596702
 CATALOG NUMBER: MSA-SA3C-827-U-SL3

Iso-Footcandle Lines of Horizontal Illumination

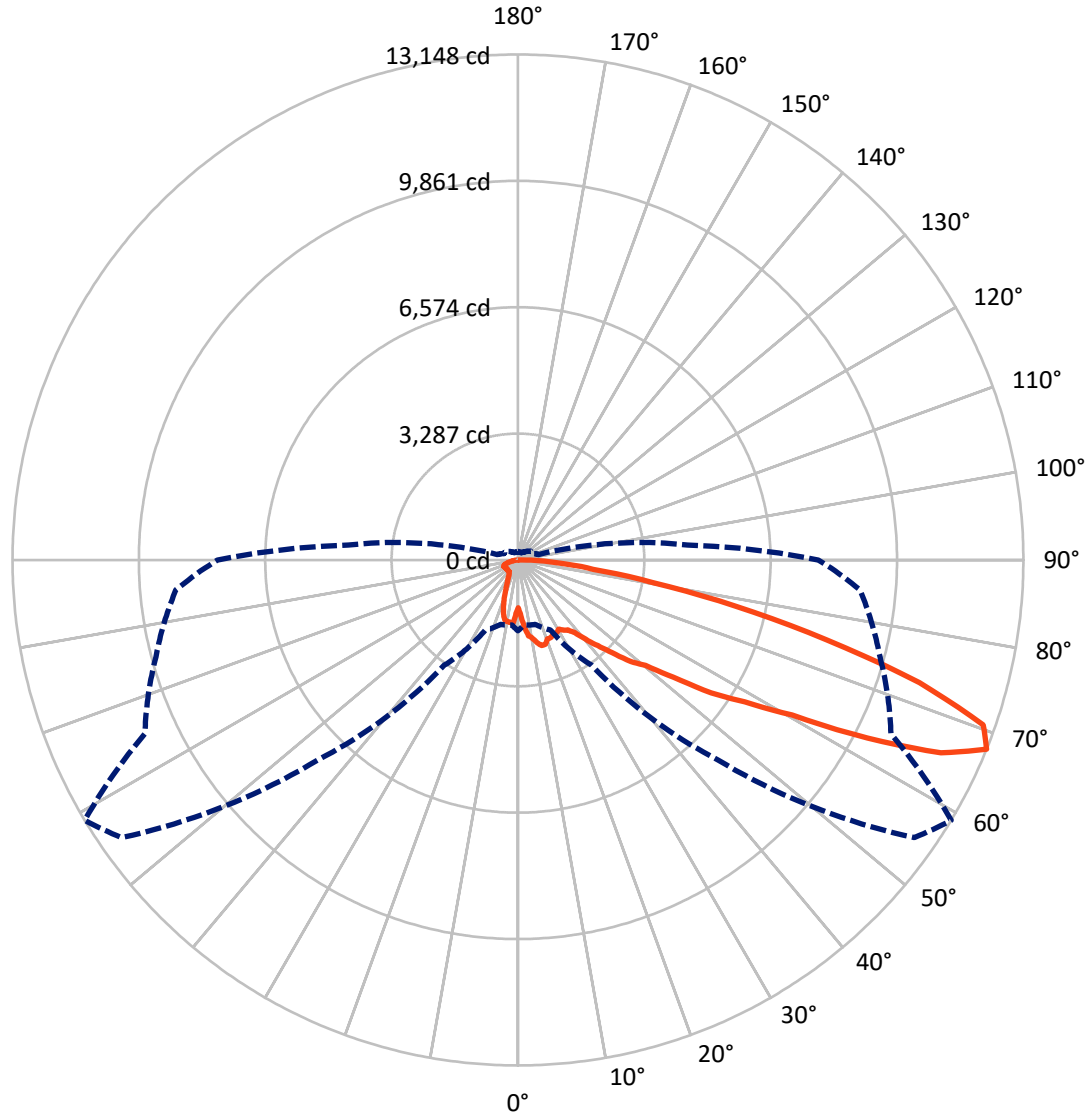
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type III - Short - N/A

REPORT NUMBER: P596702
CATALOG NUMBER: MSA-SA3C-827-U-SL3

Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P596702

CATALOG NUMBER: MSA-SA3C-827-U-SL3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1976.6	0.0	1976.6
	% Fixture	15.1	0.0	15.1
Street Side	Lumens	11155.4	0.0	11155.4
	% Fixture	84.9	0.0	84.9
Total	Lumens	13132.0	0.0	13132.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.3	1.2
10°-20°	480.3	3.7
20°-30°	685.9	5.2
30°-40°	1010.7	7.7
40°-50°	1707.5	13.0
50°-60°	2971.4	22.6
60°-70°	3786.5	28.8
70°-80°	2005.0	15.3
80°-90°	322.5	2.5
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°	13132.0	100.0
0°-180°	13132.0	100.0

Coefficient of Utilization



REPORT NUMBER: P596702

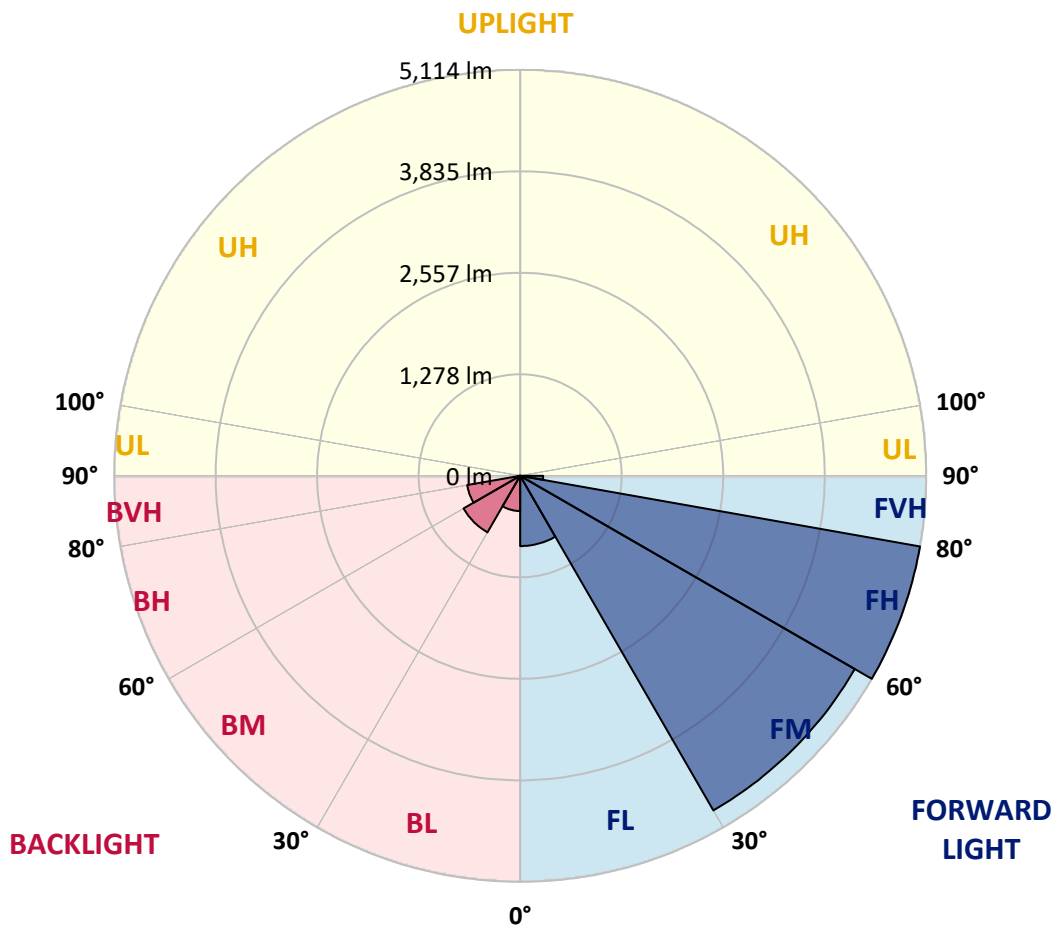
CATALOG NUMBER: MSA-SA3C-827-U-SL3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	885.1	6.7			
FM (30°-60°)	4866.5	37.1			
FH (60°-80°)	5114.0	38.9			G3/7500
FVH (80°-90°)	289.7	2.2			G3/500
BL (0°-30°)	443.3	3.4	B1/500		
BM (30°-60°)	823.1	6.3	B1/1000		
BH (60°-80°)	677.5	5.2	B2/1000		G2/1000
BVH (80°-90°)	32.8	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Short





REPORT NUMBER: P596702

CATALOG NUMBER: MSA-SA3C-827-U-SL3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6
2.5°	1551.5	1479.1	1402.3	1424.0	1468.0	1488.0	1466.3	1445.2	1417.9	1385.7	1495.8
5°	1881.5	1774.1	1758.5	1757.9	1742.4	1680.0	1760.2	1754.6	1786.9	1820.3	1906.0
7.5°	1975.5	1935.5	1892.1	1912.6	1834.2	1830.8	1955.5	1991.1	2053.4	2032.8	2148.0
10°	1927.1	1882.0	1904.9	1896.5	1903.7	1986.1	2062.3	2064.6	2131.3	2197.0	2123.0
12.5°	1842.0	1845.3	1936.0	1932.7	2049.5	2202.6	2225.4	2207.6	2316.7	2272.1	2335.6
15°	1902.6	1943.2	1920.4	1939.9	1986.1	2180.9	2244.3	2308.9	2412.4	2452.4	2389.0
17.5°	1999.5	2021.2	1918.8	1908.2	2003.3	2095.7	2253.2	2308.3	2324.4	2609.9	2520.3
20°	1958.3	2002.2	1902.1	1773.5	1931.6	2054.0	2209.2	2192.6	2271.0	2622.2	2547.6
22.5°	2075.1	2002.2	1874.8	1783.5	1839.2	1951.6	2083.5	2193.1	2286.0	2550.4	2587.1
25°	2097.4	2062.9	1943.8	1853.1	1834.2	1874.2	2062.3	2134.1	2291.1	2648.3	2566.0
27.5°	2233.2	2181.4	1938.8	1941.6	1847.5	1776.9	1995.6	2146.4	2347.8	2587.7	2617.7
30°	2401.8	2362.3	2057.9	2069.0	1938.8	1808.6	2041.2	2086.8	2380.6	2682.3	2682.8
32.5°	2528.1	2597.7	2292.2	2140.8	2094.6	1997.2	1971.1	2176.4	2342.2	2853.7	2794.1
35°	2755.7	2809.7	2472.5	2351.2	2194.8	2085.2	2161.4	2235.4	2502.0	3079.0	2959.4
37.5°	3177.0	3114.7	2807.5	2616.6	2558.2	2400.1	2442.4	2390.7	2675.6	3332.2	3283.3
40°	3420.7	3366.7	3043.4	2937.7	2706.2	2726.2	2673.4	2711.2	2907.6	3601.6	3586.0
42.5°	3661.1	3588.8	3315.5	3242.1	3011.1	2913.2	2922.7	3045.1	3265.5	4036.7	3985.0
45°	3898.7	3713.4	3593.8	3613.3	3502.0	3301.1	3315.0	3430.2	3656.1	4534.2	4415.2
47.5°	4080.7	3927.7	3834.2	3810.3	3755.2	4024.0	3903.7	3950.5	4050.1	4977.2	4932.1
50°	4425.2	4246.5	4124.7	4090.2	4277.2	4651.1	4406.3	4305.5	4517.6	5549.8	5526.5
52.5°	4976.7	4754.1	4550.9	4548.7	4819.2	5061.8	5234.3	5060.7	5138.6	6136.4	6203.2
55°	5458.0	5200.4	5017.8	5118.6	5503.6	5652.2	6238.2	6102.4	6036.8	6728.5	6919.3
57.5°	5637.8	5336.7	5217.6	5366.2	5933.8	6697.3	7316.7	6959.4	6895.4	7398.5	7798.6
60°	5243.2	4924.9	4932.1	5212.0	6195.4	7464.7	8495.9	8192.6	7817.5	8232.7	8623.3
62.5°	4119.1	3831.4	4018.9	4444.7	5976.1	8210.4	10076.3	10204.3	8870.9	8924.4	9080.7
65°	2799.7	2600.5	2769.6	3186.4	4847.0	8617.2	11581.6	12094.7	9830.3	9377.3	9278.3
67.5°	1842.5	1701.7	1734.6	2011.7	3336.7	7346.2	12588.3	13147.5	10707.3	9749.1	8929.9
70°	1426.8	1313.3	1298.8	1444.1	1978.9	5103.5	11991.7	12842.0	11241.6	9400.7	7783.6
72.5°	1119.6	1033.4	1041.2	1180.9	1532.6	2831.4	9279.4	10920.5	10436.9	8107.4	5980.0
75°	873.1	802.5	842.0	1001.7	1417.4	1759.6	6402.4	8288.3	8069.0	6003.4	3410.7
77.5°	633.8	588.2	644.4	853.1	1332.2	1509.7	3985.6	5782.4	5169.2	3082.4	1170.3
80°	415.7	390.1	436.3	695.6	1208.1	1453.0	2463.0	3543.1	2554.3	865.9	443.0
82.5°	244.9	233.7	272.1	470.8	971.1	1361.7	1642.7	1968.8	1045.1	366.2	235.4
85°	128.5	120.2	161.4	270.5	669.5	1243.2	1293.3	1178.6	504.7	159.2	112.4
87.5°	42.8	41.7	68.4	104.6	253.2	660.0	690.0	559.8	208.1	46.2	24.5
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: P596702
 CATALOG NUMBER: MSA-SA3C-827-U-SL3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6
2.5°	1510.9	1488.6	1360.6	1378.4	1395.1	1386.8	1381.8	1323.9	1318.3	1400.7	1394.0
5°	1903.7	1811.4	1702.3	1697.3	1625.5	1552.0	1566.5	1543.1	1549.8	1583.8	1587.1
7.5°	2111.3	1996.1	1892.1	1722.9	1579.3	1463.0	1481.4	1475.8	1460.8	1537.6	1558.2
10°	2107.4	2005.0	1887.6	1682.8	1586.0	1491.4	1377.9	1270.5	1238.7	1200.9	1204.2
12.5°	2246.5	2155.8	1899.8	1691.2	1559.8	1396.8	1184.2	1066.8	954.4	952.1	923.8
15°	2289.9	2223.2	1926.0	1643.3	1376.7	1143.0	923.2	795.8	714.5	698.4	674.5
17.5°	2399.6	2294.9	1846.4	1488.6	1164.2	893.7	693.9	604.9	598.2	609.4	597.1
20°	2406.8	2237.1	1702.8	1259.9	935.5	677.2	565.9	521.4	545.4	572.6	571.5
22.5°	2400.7	2164.2	1578.8	1065.1	702.8	544.2	495.8	485.8	508.1	548.7	553.7
25°	2338.4	2140.2	1423.5	874.8	570.4	466.3	453.0	459.1	486.9	534.8	534.8
27.5°	2403.5	2042.9	1228.7	711.7	479.7	415.1	424.6	440.2	460.8	515.3	525.3
30°	2382.3	2075.1	1071.8	573.2	422.9	379.5	400.7	416.3	439.6	496.4	501.4
32.5°	2439.1	1988.9	939.9	481.9	385.6	365.6	370.6	391.8	422.4	466.9	475.8
35°	2525.9	2020.6	788.5	433.5	367.3	349.5	358.9	375.6	406.2	449.6	456.9
37.5°	2803.0	2018.9	683.9	406.8	363.9	346.1	350.6	362.3	397.9	437.4	454.1
40°	2981.1	2134.7	588.8	400.7	360.0	344.5	340.6	353.4	381.7	428.5	440.2
42.5°	3315.5	2205.4	547.6	398.4	359.5	335.0	331.1	346.1	374.0	417.4	435.2
45°	3668.9	2306.1	514.7	397.3	357.8	333.3	321.6	340.6	363.9	405.7	426.3
47.5°	4084.6	2519.2	496.4	393.4	354.5	335.6	318.3	327.8	353.9	395.7	416.3
50°	4628.9	2801.4	500.3	387.9	359.5	336.1	313.3	317.8	341.7	382.3	403.5
52.5°	5290.5	3238.2	525.3	390.1	362.8	333.3	311.1	308.8	329.4	365.1	386.2
55°	6088.0	3858.1	600.4	400.7	362.8	332.8	307.7	297.7	313.3	342.2	362.8
57.5°	7050.1	4576.0	747.4	405.7	360.0	329.4	300.5	282.7	292.2	316.1	335.6
60°	7876.5	5155.3	898.7	409.0	365.6	321.6	286.0	263.8	269.9	288.3	305.5
62.5°	8297.8	5317.8	944.4	406.2	380.6	316.6	268.8	243.7	244.3	259.9	275.5
65°	8376.8	5101.3	761.3	403.5	400.1	316.1	256.5	226.5	222.6	233.7	247.1
67.5°	7813.6	4428.0	549.3	397.3	402.3	312.7	248.2	212.6	202.6	210.4	221.5
70°	6634.4	3566.0	461.3	385.1	375.6	296.1	233.7	198.1	184.8	190.3	198.7
72.5°	4946.0	2638.3	402.3	358.9	327.2	253.2	211.5	182.0	168.1	172.0	178.1
75°	2747.9	1407.4	336.7	312.2	267.1	204.8	180.3	161.4	149.1	150.8	157.5
77.5°	912.6	519.2	247.1	247.6	202.0	158.0	148.6	138.0	128.5	129.1	134.7
80°	413.5	287.1	177.0	178.1	140.8	114.6	114.1	110.7	104.6	102.9	106.8
82.5°	239.8	174.2	121.3	115.7	90.7	74.6	82.9	81.2	79.6	73.5	74.6
85°	118.0	93.5	63.4	60.1	50.1	37.3	44.5	46.2	44.5	37.8	37.3
87.5°	28.9	30.6	15.6	14.5	8.3	3.9	6.7	6.7	8.3	5.6	2.8
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)