

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: LUMARK

Report Number: P882927

Luminaire Tested: **NAV-SB3A-740-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882927
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-740-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14373 lumens
Efficiency: N/A
Efficacy: 169.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

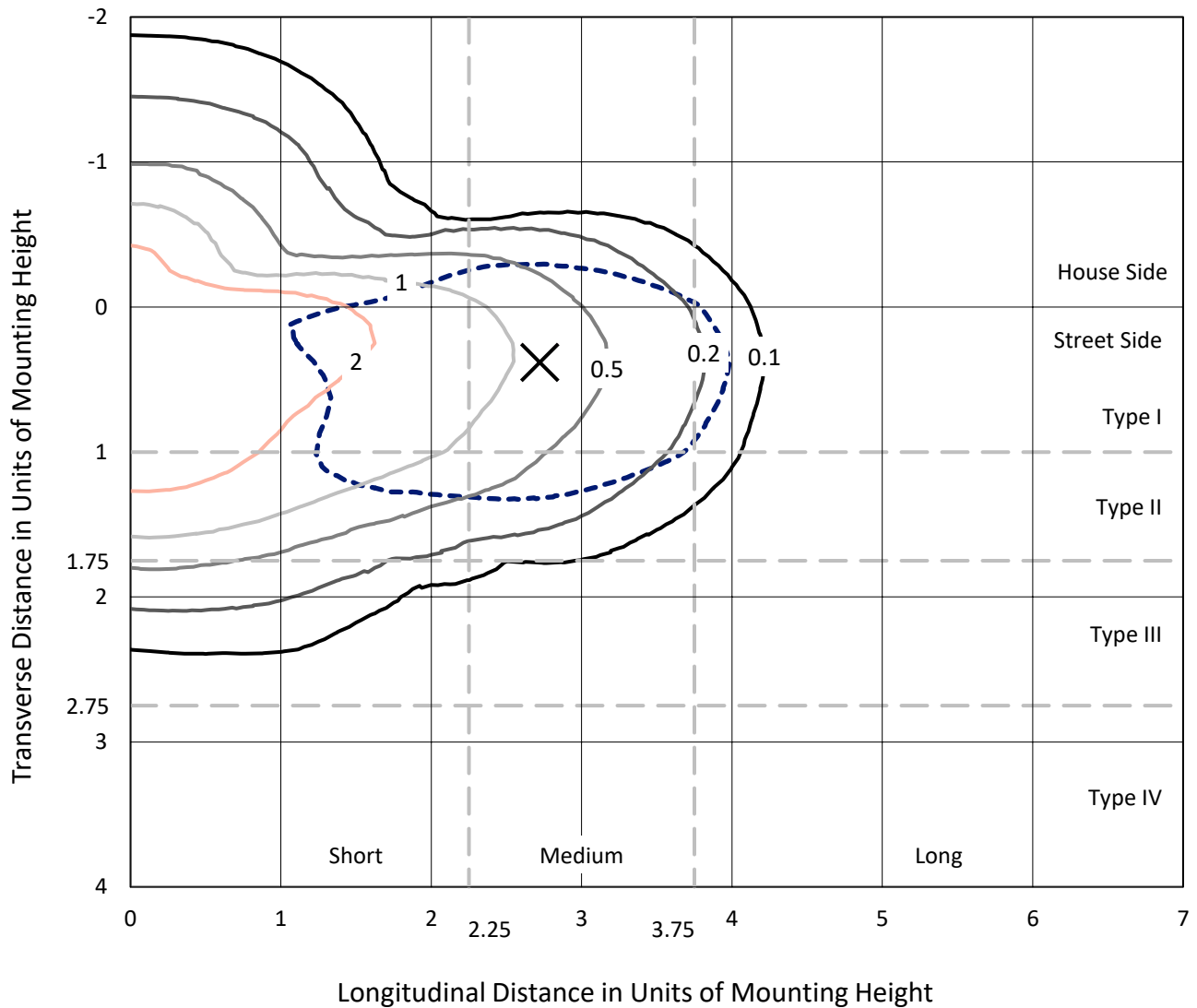
Input Watts (W): 84.7
Input Voltage (V): 120.0
Input Current (Ain): 0.717
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P882927
 CATALOG NUMBER: NAV-SB3A-740-U-T2

Iso-Footcandle Lines of Horizontal Illumination

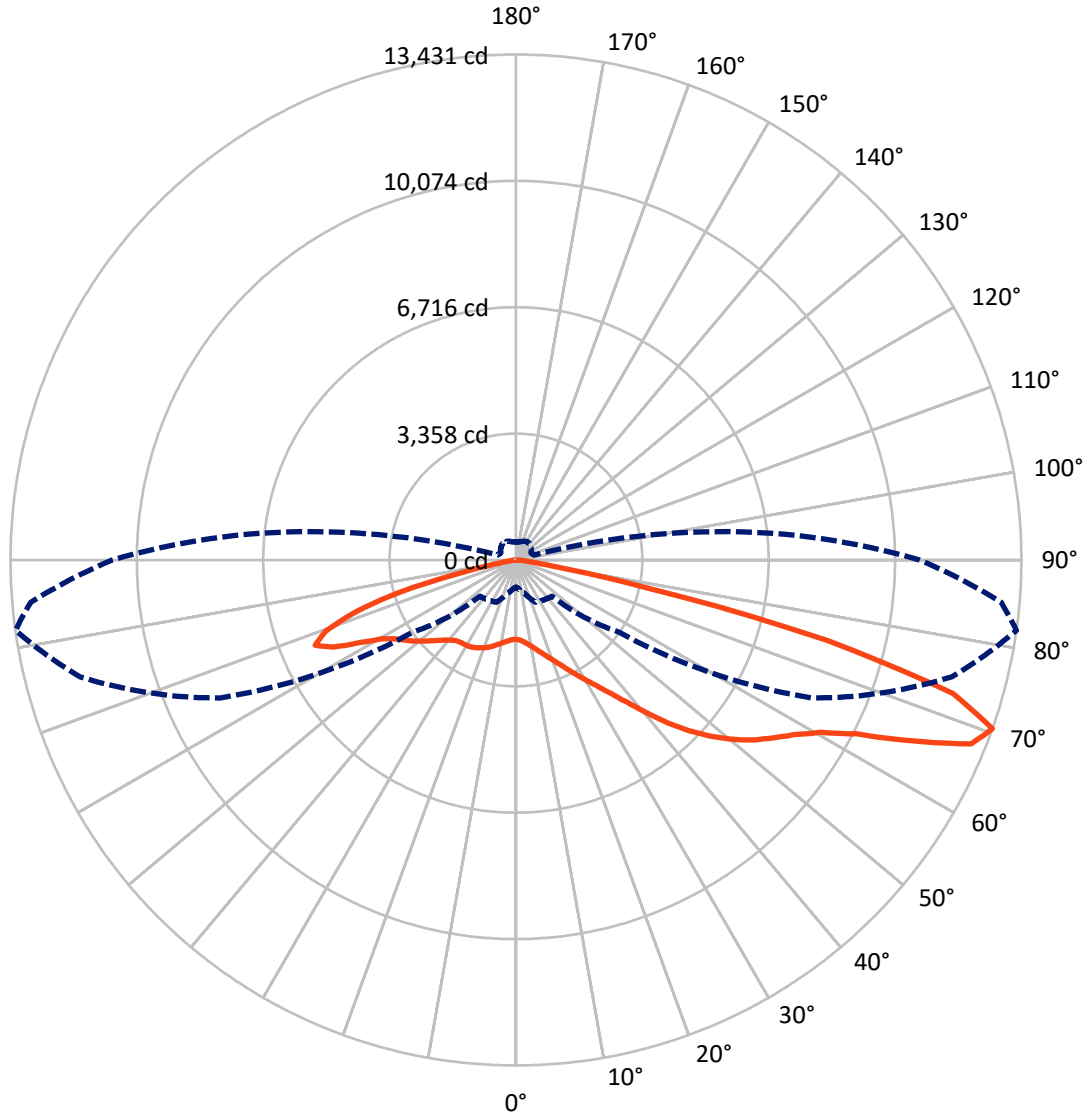
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
 Type II - Medium - N/A

REPORT NUMBER: P882927
CATALOG NUMBER: NAV-SB3A-740-U-T2

Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P882927
 CATALOG NUMBER: NAV-SB3A-740-U-T2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3543.3	0.0	3543.3
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	10829.7	0.0	10829.7
	% Fixture	75.3	0.0	75.3
Total	Lumens	14373.0	0.0	14373.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.0	1.4
10°-20°	571.6	4.0
20°-30°	956.3	6.7
30°-40°	1494.0	10.4
40°-50°	2379.3	16.6
50°-60°	3311.1	23.0
60°-70°	3463.6	24.1
70°-80°	1810.2	12.6
80°-90°	188.0	1.3
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°	14373.0	100.0
0°-180°	14373.0	100.0

Coefficient of Utilization



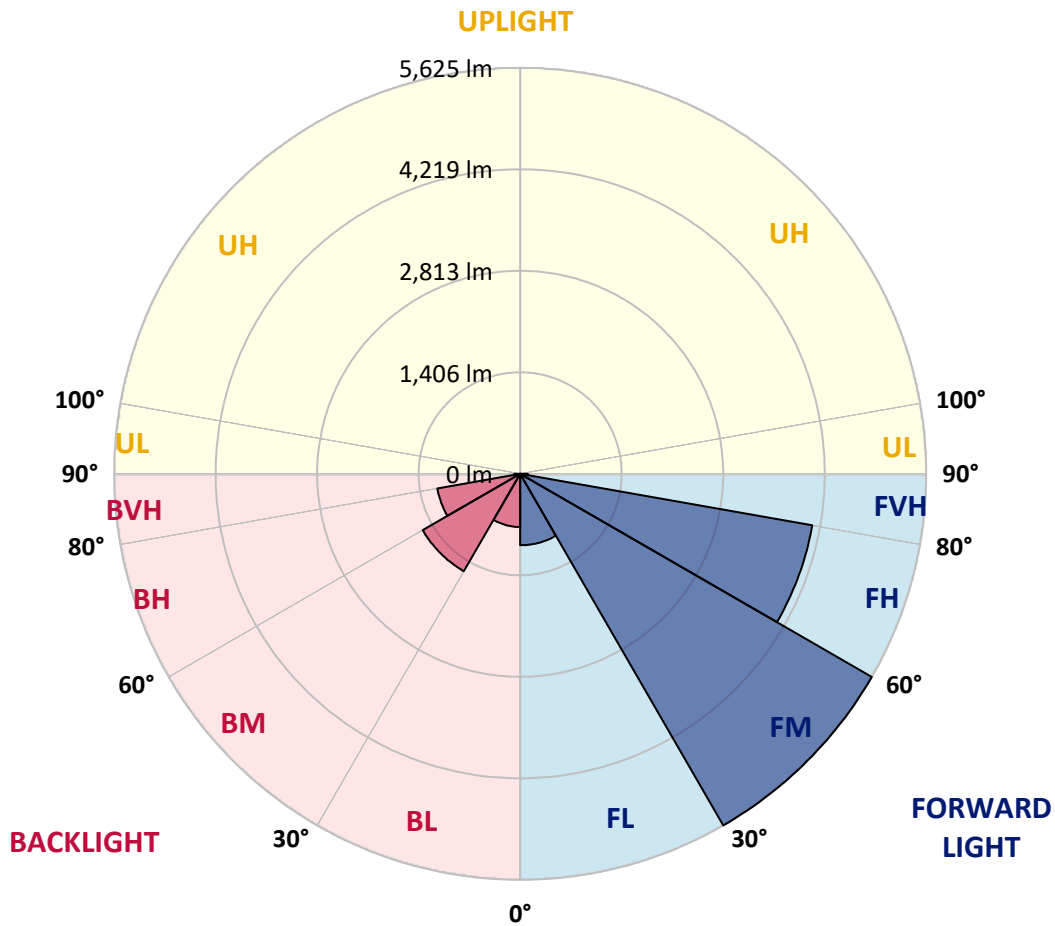
REPORT NUMBER: P882927
 CATALOG NUMBER: NAV-SB3A-740-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	989.7	6.9			
FM (30°-60°)	5625.4	39.1			
FH (60°-80°)	4109.3	28.6			G2/5000
FVH (80°-90°)	105.2	0.7			G2/225
BL (0°-30°)	737.1	5.1	B2/1000		
BM (30°-60°)	1558.9	10.8	B2/2500		
BH (60°-80°)	1164.5	8.1	B3/2500		G3/2500
BVH (80°-90°)	82.7	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



REPORT NUMBER: P882927

CATALOG NUMBER: NAV-SB3A-740-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2107.3	2107.3	2107.3	2107.3	2107.3	2107.3	2107.3	2107.3	2107.3	2107.3	2107.3
2.5°	2157.6	2169.8	2166.0	2162.2	2162.2	2156.8	2156.1	2148.4	2142.3	2132.4	2130.1
5°	2185.1	2198.0	2196.5	2199.5	2209.5	2211.7	2214.0	2209.5	2197.3	2185.1	2179.7
7.5°	2160.6	2175.1	2179.7	2198.0	2228.5	2256.0	2276.6	2285.0	2273.5	2256.0	2247.6
10°	2078.3	2094.3	2110.3	2153.8	2207.9	2272.8	2327.7	2360.5	2358.2	2341.4	2326.9
12.5°	1911.3	1928.0	1962.4	2047.0	2146.2	2260.6	2362.8	2431.4	2455.0	2442.8	2417.7
15°	1777.8	1792.3	1818.2	1905.2	2034.0	2207.9	2375.7	2509.2	2569.4	2562.6	2532.1
17.5°	1774.0	1780.1	1796.1	1837.3	1936.4	2125.6	2362.0	2585.5	2700.6	2699.9	2661.7
20°	1841.1	1843.4	1852.5	1860.9	1917.4	2063.0	2326.9	2648.8	2847.8	2847.8	2806.6
22.5°	1934.1	1932.6	1941.8	1934.1	1961.6	2057.7	2304.8	2704.4	3011.8	3024.0	2972.1
25°	2073.7	2066.1	2063.8	2046.2	2051.6	2107.3	2329.2	2767.7	3206.3	3231.4	3166.6
27.5°	2259.8	2247.6	2239.2	2198.8	2185.1	2209.5	2403.9	2844.0	3422.9	3466.3	3384.0
30°	2502.3	2480.2	2468.0	2397.8	2348.3	2352.1	2516.8	2945.4	3649.4	3719.5	3615.1
32.5°	2833.3	2799.0	2766.2	2651.0	2560.3	2530.5	2662.5	3085.8	3895.0	4007.1	3872.8
35°	3204.0	3176.5	3141.4	2963.7	2824.2	2755.5	2859.3	3281.8	4182.5	4360.2	4185.5
37.5°	3560.9	3537.3	3554.0	3314.6	3134.6	3034.7	3117.0	3544.9	4537.1	4799.5	4577.6
40°	3930.0	3911.7	3914.0	3685.2	3475.5	3363.4	3429.7	3875.1	4943.6	5321.9	5048.9
42.5°	4331.2	4317.5	4271.7	4068.9	3833.2	3728.7	3789.7	4256.5	5379.9	5916.8	5566.0
45°	4780.4	4772.0	4729.3	4496.7	4226.7	4109.3	4191.6	4677.5	5818.4	6476.6	6085.4
47.5°	5168.6	5175.5	5170.2	4974.1	4694.2	4521.9	4620.3	5116.8	6226.5	7002.9	6583.4
50°	5355.5	5391.3	5443.9	5382.9	5209.0	5033.6	5052.7	5540.8	6615.4	7496.3	7060.8
52.5°	5257.9	5325.7	5469.1	5566.7	5633.9	5597.2	5546.1	5961.8	6981.5	7941.7	7512.3
55°	4894.1	4989.4	5227.4	5463.0	5805.5	6071.6	6138.7	6428.6	7338.4	8333.7	7939.4
57.5°	4231.3	4386.1	4599.7	5076.3	5652.9	6301.2	6829.7	7076.1	7716.7	8752.4	8386.3
60°	3094.9	3302.4	3567.8	4277.1	5119.1	6178.4	7417.7	8070.6	8254.4	9294.7	8968.3
62.5°	1980.7	2108.8	2352.8	3020.9	3988.8	5549.2	7597.7	9313.7	9165.8	10184.0	9840.8
65°	1356.0	1438.4	1661.9	2037.1	2578.6	4130.6	7115.7	10245.7	10613.3	11593.4	11332.5
67.5°	985.4	1047.9	1238.6	1567.3	1680.2	2444.4	5521.7	10203.0	12020.5	13045.5	12639.8
70°	718.4	762.7	922.8	1238.6	1292.7	1359.8	3345.1	8673.1	11990.0	13431.4	12945.6
72.5°	532.3	562.9	670.4	961.0	1046.4	918.3	1655.8	6303.5	10302.9	12148.6	11758.9
75°	385.1	408.0	487.3	735.2	837.4	699.4	826.0	3683.7	7186.7	8545.7	8614.4
77.5°	294.4	311.9	363.8	538.4	670.4	524.7	512.5	1694.7	3407.6	3424.4	3616.6
80°	236.4	247.9	276.1	379.0	514.0	392.8	334.1	684.1	1076.9	911.4	956.4
82.5°	173.9	193.0	233.4	266.2	367.6	270.7	203.6	345.5	409.6	352.4	355.4
85°	99.1	112.1	141.1	190.7	234.9	165.5	116.7	153.3	190.7	156.3	139.6
87.5°	35.1	45.8	49.6	74.7	102.2	68.6	45.0	44.2	62.5	46.5	38.9
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: P882927
 CATALOG NUMBER: NAV-SB3A-740-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2107.3	2107.3	2107.3	2107.3	2107.3	2107.3	2107.3	2107.3	2107.3	2107.3	2107.3
2.5°	2122.5	2118.7	2103.4	2082.9	2061.5	2040.9	2034.0	2019.6	2009.6	2004.3	2010.4
5°	2165.2	2153.0	2117.2	2071.4	2023.4	1971.5	1934.9	1901.3	1876.9	1854.1	1863.2
7.5°	2226.2	2204.9	2143.1	2063.0	1977.6	1891.4	1827.4	1778.6	1745.8	1724.4	1729.0
10°	2297.2	2264.4	2169.8	2050.1	1918.1	1794.6	1719.1	1677.1	1656.5	1645.1	1648.1
12.5°	2378.8	2332.2	2197.3	2020.3	1827.4	1686.3	1634.4	1622.2	1623.0	1623.7	1625.3
15°	2479.4	2414.6	2219.4	1955.5	1709.1	1603.1	1594.0	1613.8	1634.4	1644.3	1643.6
17.5°	2593.1	2501.6	2223.2	1848.7	1593.2	1549.7	1578.7	1621.4	1652.7	1666.4	1669.5
20°	2715.1	2590.0	2195.7	1697.7	1497.9	1506.3	1558.1	1613.1	1647.4	1664.9	1669.5
22.5°	2854.7	2684.6	2130.1	1539.1	1420.1	1459.0	1520.0	1573.4	1609.2	1626.8	1631.4
25°	3014.1	2790.6	2027.2	1405.6	1353.0	1405.6	1466.6	1510.9	1539.8	1555.8	1560.4
27.5°	3191.0	2901.2	1889.9	1299.6	1294.3	1350.7	1401.0	1435.3	1450.6	1462.8	1467.4
30°	3368.7	3001.9	1723.6	1219.5	1243.2	1296.5	1332.4	1347.6	1352.2	1354.5	1359.8
32.5°	3560.9	3088.8	1549.0	1153.2	1194.3	1243.9	1265.3	1272.1	1250.8	1236.3	1240.9
35°	3793.5	3181.9	1378.1	1100.5	1146.3	1189.0	1195.9	1189.8	1164.6	1134.9	1136.4
37.5°	4081.1	3297.8	1241.6	1063.2	1101.3	1129.5	1121.1	1119.6	1121.9	1086.8	1089.1
40°	4433.4	3448.8	1141.7	1034.2	1064.7	1070.8	1047.1	1060.1	1071.6	1018.2	1019.7
42.5°	4824.7	3631.1	1078.4	1014.4	1034.2	1019.7	983.1	997.6	996.0	925.9	925.1
45°	5223.5	3829.4	1056.3	999.9	1006.0	977.0	936.6	940.4	908.3	845.0	847.3
47.5°	5620.1	4042.2	1070.0	987.7	970.9	938.1	906.8	890.0	842.8	795.5	795.5
50°	6009.1	4265.6	1120.4	963.3	922.8	903.8	880.9	851.1	800.8	760.4	757.3
52.5°	6369.8	4490.6	1176.8	922.8	862.6	874.0	859.5	825.2	775.6	734.5	735.2
55°	6711.5	4715.6	1198.9	867.2	806.1	848.1	839.7	776.4	716.9	683.4	680.3
57.5°	7083.7	4986.3	1174.5	796.2	760.4	818.3	786.3	716.1	681.8	656.7	654.4
60°	7599.3	5411.2	1121.9	708.5	716.9	774.1	719.2	690.2	652.8	624.6	623.1
62.5°	8455.7	6203.6	1037.2	621.6	665.8	708.5	687.2	658.2	620.1	592.6	592.6
65°	9721.8	7304.9	877.8	553.7	608.6	644.5	652.8	623.9	584.2	555.2	556.8
67.5°	10789.5	7995.8	664.3	497.3	549.9	592.6	616.2	588.0	546.1	517.9	518.6
70°	10730.8	7494.0	507.2	441.6	498.0	541.5	572.0	549.9	504.9	478.2	480.5
72.5°	9531.1	6269.2	410.3	385.1	445.4	488.1	524.7	507.9	462.2	436.2	436.2
75°	7002.1	4450.2	327.9	327.9	379.8	432.4	472.9	462.2	420.2	401.9	396.6
77.5°	2951.5	1867.0	257.0	272.3	315.7	371.4	421.8	425.6	389.0	411.8	373.7
80°	784.8	514.8	196.0	214.3	247.9	306.6	366.8	365.3	325.7	304.3	283.0
82.5°	299.0	202.9	139.6	151.0	179.2	234.9	290.6	299.7	260.1	225.0	225.0
85°	115.2	86.9	86.2	90.8	104.5	155.6	219.6	227.3	196.0	166.3	171.6
87.5°	29.7	25.9	32.0	30.5	48.0	83.1	125.8	130.4	119.7	69.4	99.1
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)