

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: P882577

Luminaire Tested: **NAV-SB2C-735-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882577
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-SB2C-735-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15124 lumens
Efficiency: N/A
Efficacy: 149.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

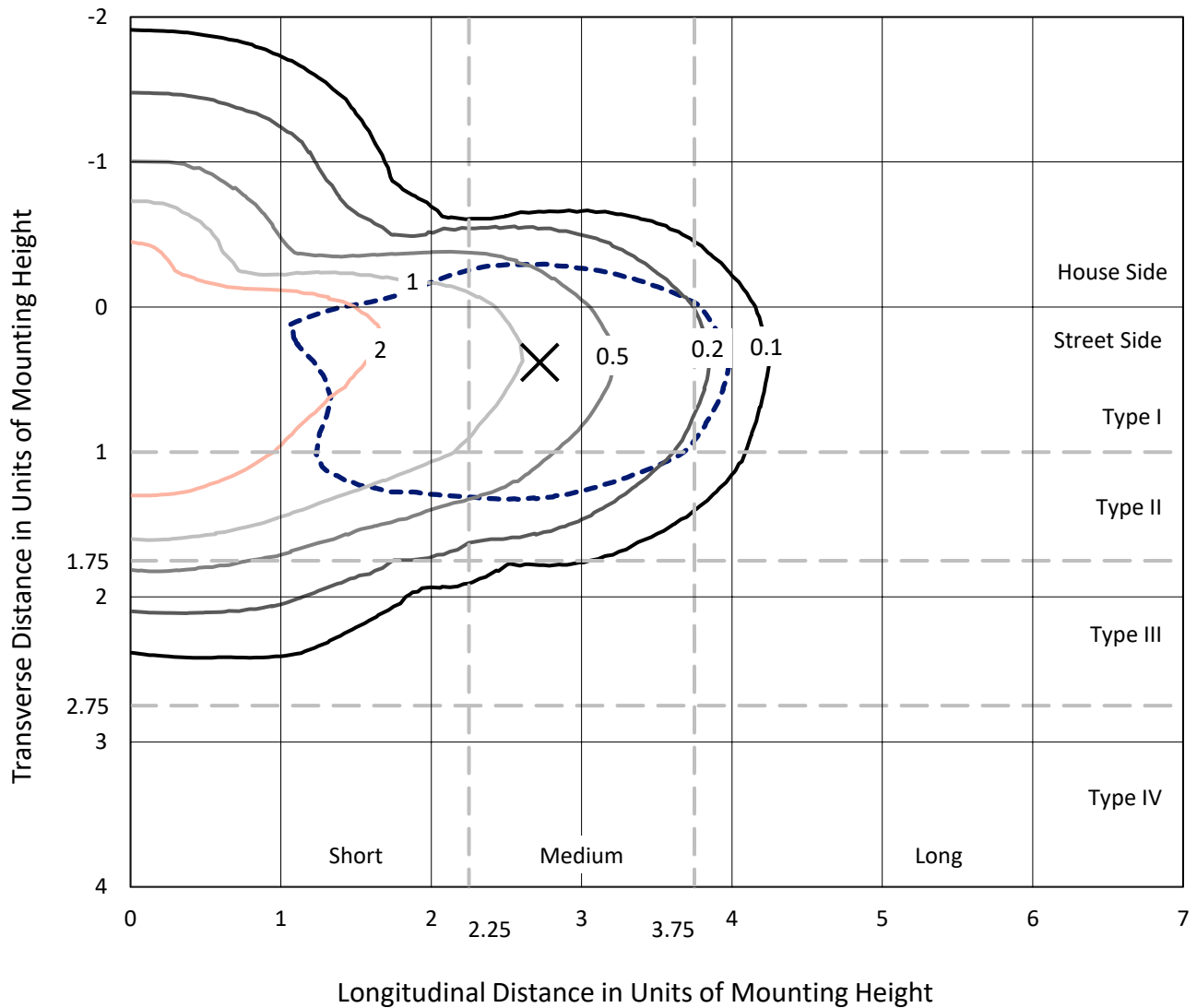
Input Watts (W): 100.9
Input Voltage (V): 120.0
Input Current (Ain): 0.857
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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 CATALOG NUMBER: NAV-SB2C-735-U-T2

Iso-Footcandle Lines of Horizontal Illumination

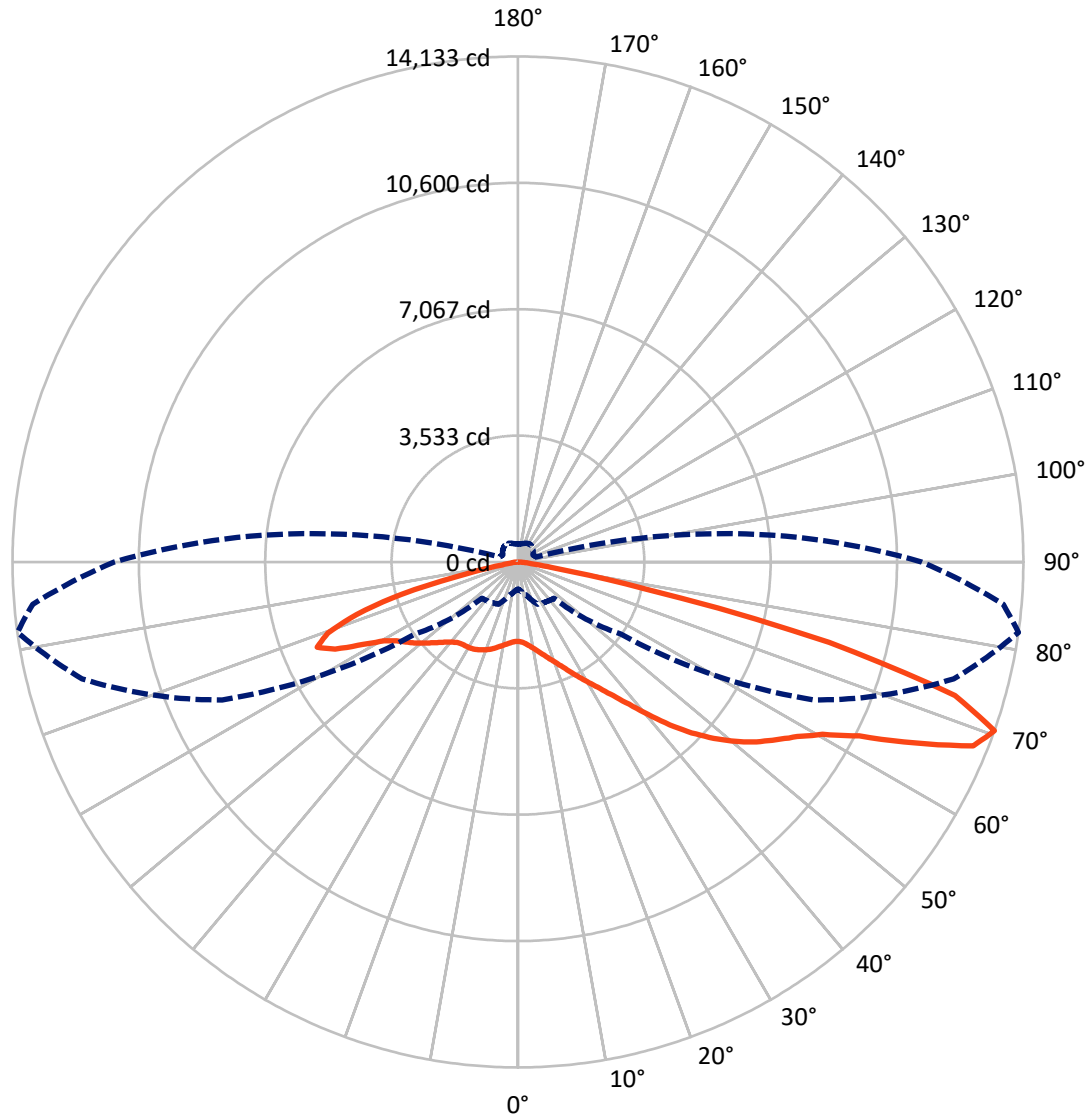
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
 Type II - Medium - N/A

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CATALOG NUMBER: NAV-SB2C-735-U-T2

Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3728.4	0.0	3728.4
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	11395.6	0.0	11395.6
	% Fixture	75.3	0.0	75.3
Total	Lumens	15124.0	0.0	15124.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.4	1.4
10°-20°	601.5	4.0
20°-30°	1006.2	6.7
30°-40°	1572.0	10.4
40°-50°	2503.6	16.6
50°-60°	3484.1	23.0
60°-70°	3644.5	24.1
70°-80°	1904.8	12.6
80°-90°	197.8	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°	15124.0	100.0
0°-180°	15124.0	100.0

Coefficient of Utilization



REPORT NUMBER: P882577

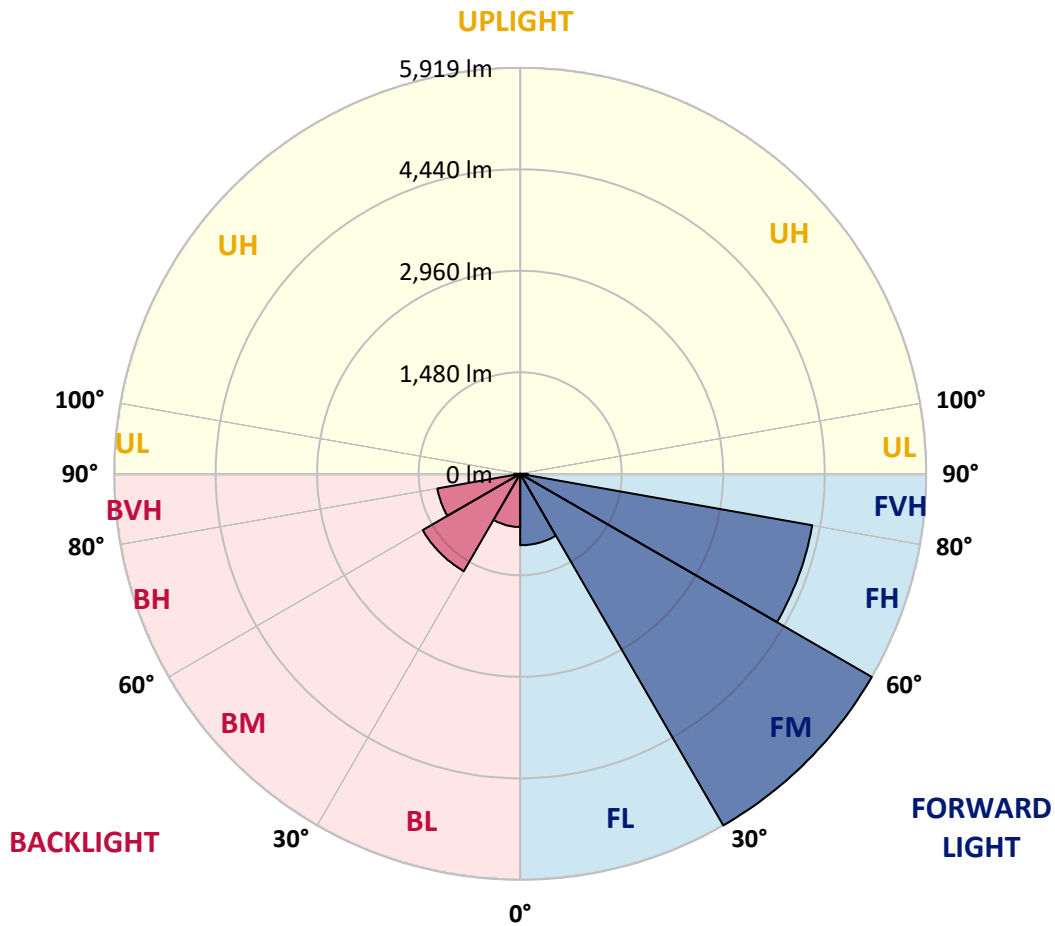
CATALOG NUMBER: NAV-SB2C-735-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1041.5	6.9			
FM (30°-60°)	5919.4	39.1			
FH (60°-80°)	4324.0	28.6			G2/5000
FVH (80°-90°)	110.7	0.7			G2/225
BL (0°-30°)	775.7	5.1	B2/1000		
BM (30°-60°)	1640.4	10.8	B2/2500		
BH (60°-80°)	1225.4	8.1	B3/2500		G3/2500
BVH (80°-90°)	87.1	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: P882577

CATALOG NUMBER: NAV-SB2C-735-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4
2.5°	2270.3	2283.2	2279.2	2275.1	2275.1	2269.5	2268.7	2260.7	2254.3	2243.9	2241.4
5°	2299.2	2312.9	2311.3	2314.5	2324.9	2327.3	2329.7	2324.9	2312.1	2299.2	2293.6
7.5°	2273.5	2288.8	2293.6	2312.9	2345.0	2373.9	2395.5	2404.4	2392.3	2373.9	2365.0
10°	2186.9	2203.7	2220.6	2266.3	2323.3	2391.5	2449.3	2483.8	2481.4	2463.7	2448.5
12.5°	2011.1	2028.8	2064.9	2154.0	2258.3	2378.7	2486.2	2558.4	2583.3	2570.5	2544.0
15°	1870.7	1885.9	1913.2	2004.7	2140.3	2323.3	2499.9	2640.3	2703.7	2696.5	2664.4
17.5°	1866.7	1873.1	1889.9	1933.3	2037.6	2236.6	2485.4	2720.5	2841.7	2840.9	2800.8
20°	1937.3	1939.7	1949.3	1958.2	2017.5	2170.8	2448.5	2787.2	2996.6	2996.6	2953.3
22.5°	2035.2	2033.6	2043.2	2035.2	2064.1	2165.2	2425.2	2845.7	3169.2	3182.0	3127.4
25°	2182.1	2174.0	2171.6	2153.2	2158.8	2217.4	2450.9	2912.4	3373.8	3400.3	3332.1
27.5°	2377.9	2365.0	2356.2	2313.7	2299.2	2324.9	2529.5	2992.6	3601.7	3647.5	3560.8
30°	2633.1	2609.8	2597.0	2523.1	2471.0	2475.0	2648.3	3099.3	3840.1	3913.9	3804.0
32.5°	2981.4	2945.3	2910.7	2789.6	2694.1	2662.8	2801.6	3247.0	4098.5	4216.4	4075.2
35°	3371.4	3342.5	3305.6	3118.6	2971.7	2899.5	3008.7	3453.3	4401.0	4588.0	4404.2
37.5°	3747.0	3722.1	3739.8	3487.8	3298.4	3193.2	3279.9	3730.1	4774.2	5050.3	4816.7
40°	4135.4	4116.1	4118.5	3877.8	3657.1	3539.1	3608.9	4077.6	5201.9	5600.0	5312.7
42.5°	4557.5	4543.1	4494.9	4281.5	4033.5	3923.5	3987.7	4478.9	5661.0	6226.0	5856.8
45°	5030.2	5021.4	4976.4	4731.7	4447.6	4324.0	4410.7	4921.9	6122.4	6815.0	6403.3
47.5°	5438.7	5445.9	5440.3	5234.0	4939.5	4758.2	4861.7	5384.1	6551.8	7368.8	6927.4
50°	5635.3	5673.0	5728.4	5664.2	5481.2	5296.6	5316.7	5830.3	6961.1	7888.0	7429.7
52.5°	5532.6	5604.0	5754.9	5857.6	5928.2	5889.7	5835.9	6273.3	7346.3	8356.7	7904.8
55°	5149.8	5250.1	5500.5	5748.5	6108.8	6388.9	6459.5	6764.5	7721.9	8769.2	8354.3
57.5°	4452.4	4615.3	4840.0	5341.6	5948.3	6630.4	7186.6	7445.8	8119.9	9209.7	8824.5
60°	3256.6	3474.9	3754.2	4500.5	5386.5	6501.2	7805.3	8492.3	8685.7	9780.3	9436.9
62.5°	2084.1	2219.0	2475.8	3178.8	4197.2	5839.1	7994.7	9800.4	9644.7	10716.1	10354.9
65°	1426.9	1513.6	1748.7	2143.5	2713.3	4346.5	7487.5	10781.1	11167.9	12199.1	11924.7
67.5°	1036.9	1102.7	1303.3	1649.2	1768.0	2572.1	5810.3	10736.1	12648.5	13727.1	13300.2
70°	756.0	802.5	971.1	1303.3	1360.3	1430.9	3519.9	9126.3	12616.4	14133.2	13622.0
72.5°	560.2	592.3	705.4	1011.2	1101.1	966.2	1742.3	6632.8	10841.3	12783.4	12373.3
75°	405.3	429.3	512.8	773.6	881.2	735.9	869.1	3876.2	7562.2	8992.3	9064.5
77.5°	309.8	328.2	382.8	566.6	705.4	552.1	539.3	1783.2	3585.7	3603.3	3805.6
80°	248.8	260.8	290.5	398.9	540.9	413.3	351.5	719.9	1133.2	959.0	1006.4
82.5°	183.0	203.0	245.6	280.1	386.8	284.9	214.3	363.5	431.0	370.8	374.0
85°	104.3	118.0	148.5	200.6	247.2	174.1	122.8	161.3	200.6	164.5	146.9
87.5°	36.9	48.2	52.2	78.6	107.5	72.2	47.3	46.5	65.8	49.0	40.9
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: P882577

CATALOG NUMBER: NAV-SB2C-735-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4
2.5°	2233.4	2229.4	2213.4	2191.7	2169.2	2147.5	2140.3	2125.1	2114.6	2109.0	2115.4
5°	2278.4	2265.5	2227.8	2179.6	2129.1	2074.5	2036.0	2000.7	1975.0	1950.9	1960.6
7.5°	2342.6	2320.1	2255.1	2170.8	2080.9	1990.3	1922.8	1871.5	1837.0	1814.5	1819.3
10°	2417.2	2382.7	2283.2	2157.2	2018.3	1888.3	1808.9	1764.7	1743.1	1731.0	1734.2
12.5°	2503.1	2454.1	2312.1	2125.9	1922.8	1774.4	1719.8	1707.0	1707.8	1708.6	1710.2
15°	2609.0	2540.8	2335.3	2057.7	1798.5	1686.9	1677.3	1698.1	1719.8	1730.2	1729.4
17.5°	2728.6	2632.3	2339.4	1945.3	1676.5	1630.7	1661.2	1706.2	1739.1	1753.5	1756.7
20°	2857.0	2725.4	2310.5	1786.4	1576.2	1585.0	1639.6	1697.3	1733.4	1751.9	1756.7
22.5°	3003.8	2824.9	2241.4	1619.5	1494.3	1535.2	1599.4	1655.6	1693.3	1711.8	1716.6
25°	3171.6	2936.4	2133.1	1479.0	1423.7	1479.0	1543.2	1589.8	1620.3	1637.1	1642.0
27.5°	3357.8	3052.8	1988.6	1367.5	1361.9	1421.3	1474.2	1510.3	1526.4	1539.2	1544.1
30°	3544.7	3158.7	1813.7	1283.2	1308.1	1364.3	1402.0	1418.1	1422.9	1425.3	1430.9
32.5°	3747.0	3250.2	1629.9	1213.4	1256.7	1308.9	1331.4	1338.6	1316.1	1300.9	1305.7
35°	3991.7	3348.1	1450.2	1158.0	1206.2	1251.1	1258.4	1251.9	1225.5	1194.2	1195.8
37.5°	4294.3	3470.1	1306.5	1118.7	1158.8	1188.5	1179.7	1178.1	1180.5	1143.6	1146.0
40°	4665.1	3629.0	1201.4	1088.2	1120.3	1126.7	1101.9	1115.5	1127.5	1071.4	1073.0
42.5°	5076.8	3820.8	1134.8	1067.4	1088.2	1073.0	1034.5	1049.7	1048.1	974.3	973.5
45°	5496.5	4029.5	1111.5	1052.1	1058.5	1028.0	985.5	989.5	955.8	889.2	891.6
47.5°	5913.8	4253.4	1125.9	1039.3	1021.6	987.1	954.2	936.5	886.8	837.0	837.0
50°	6323.1	4488.5	1178.9	1013.6	971.1	951.0	926.9	895.6	842.6	800.1	796.9
52.5°	6702.7	4725.2	1238.3	971.1	907.7	919.7	904.4	868.3	816.2	772.8	773.6
55°	7062.2	4962.0	1261.6	912.5	848.3	892.4	883.6	817.0	754.4	719.1	715.8
57.5°	7453.8	5246.9	1235.9	837.8	800.1	861.1	827.4	753.6	717.5	691.0	688.6
60°	7996.3	5693.9	1180.5	745.5	754.4	814.6	756.8	726.3	687.0	657.3	655.7
62.5°	8897.6	6527.7	1091.4	654.1	700.6	745.5	723.1	692.6	652.5	623.6	623.6
65°	10229.7	7686.6	923.7	582.6	640.4	678.1	687.0	656.5	614.7	584.2	585.8
67.5°	11353.3	8413.6	699.0	523.2	578.6	623.6	648.4	618.7	574.6	544.9	545.7
70°	11291.5	7885.6	533.7	464.7	524.0	569.8	601.9	578.6	531.3	503.2	505.6
72.5°	10029.1	6596.7	431.8	405.3	468.7	513.6	552.1	534.5	486.3	459.0	459.0
75°	7368.0	4682.7	345.1	345.1	399.7	455.0	497.6	486.3	442.2	422.9	417.3
77.5°	3105.8	1964.6	270.4	286.5	332.2	390.8	443.8	447.8	409.3	433.4	393.2
80°	825.8	541.7	206.2	225.5	260.8	322.6	386.0	384.4	342.7	320.2	297.7
82.5°	314.6	213.5	146.9	158.9	188.6	247.2	305.8	315.4	273.7	236.7	236.7
85°	121.2	91.5	90.7	95.5	109.9	163.7	231.1	239.2	206.2	174.9	180.6
87.5°	31.3	27.3	33.7	32.1	50.6	87.5	132.4	137.2	126.0	73.0	104.3
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)