

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: P882637

Luminaire Tested: **NAV-SB2C-835-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882637
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-835-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 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: 12761 lumens
Efficiency: N/A
Efficacy: 126.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

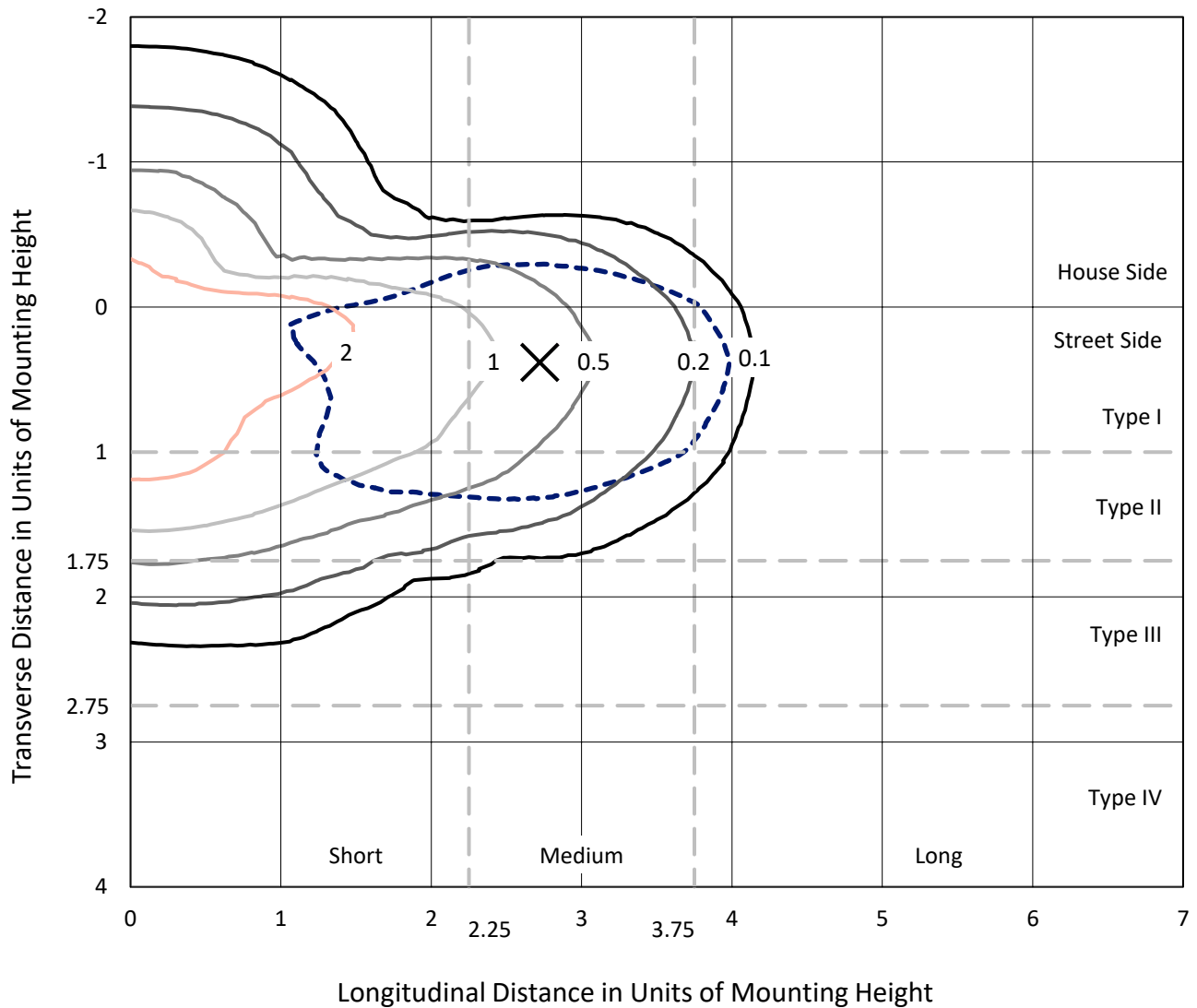
Input Watts (W): 100.9
Input Voltage (V): 120.0
Input Current (Ain): 0.857
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P882637
 CATALOG NUMBER: NAV-SB2C-835-U-T2

Iso-Footcandle Lines of Horizontal Illumination

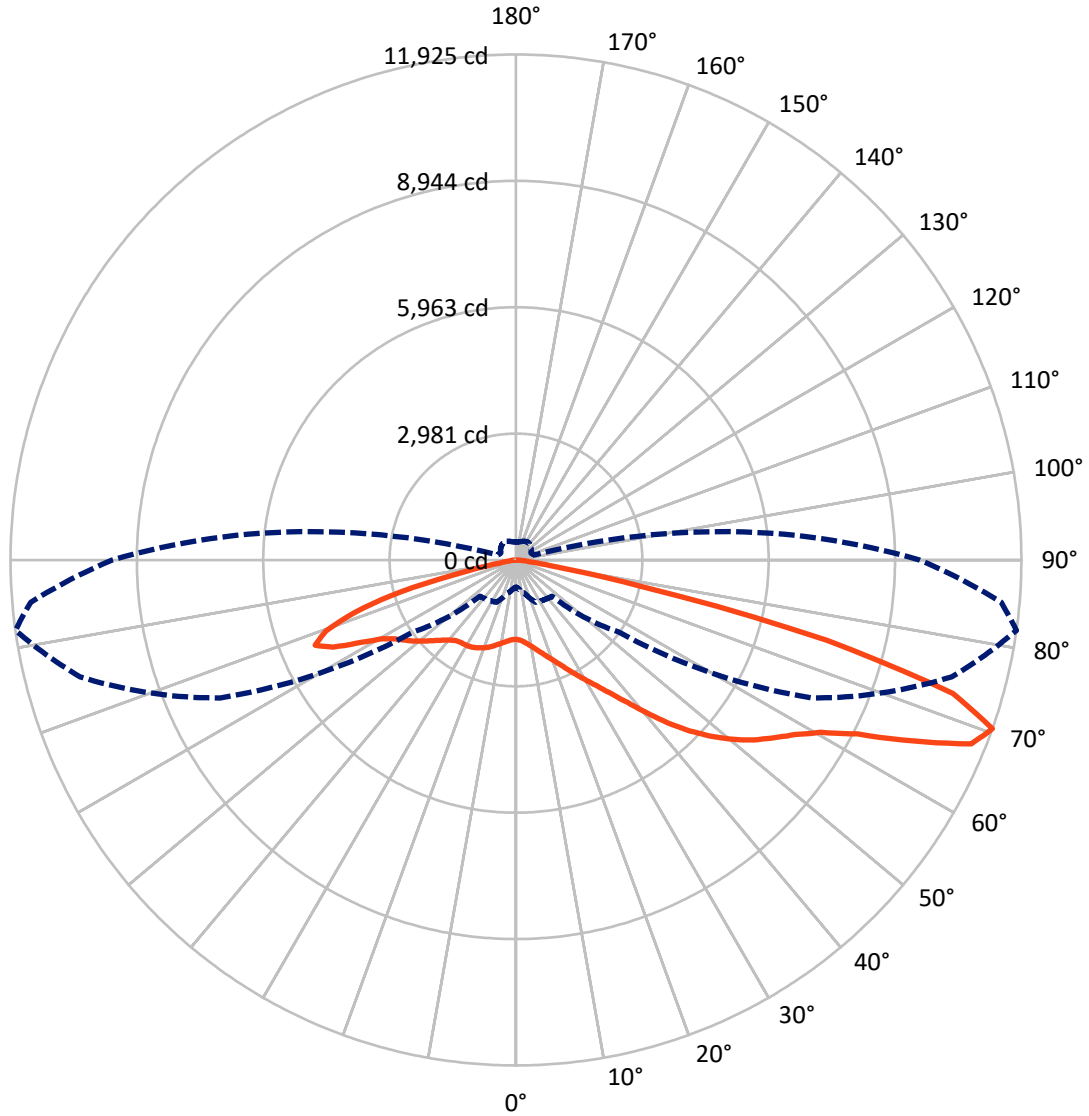
× Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P882637
CATALOG NUMBER: NAV-SB2C-835-U-T2

Luminous Intensity Polar Plot



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

REPORT NUMBER: P882637
 CATALOG NUMBER: NAV-SB2C-835-U-T2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3145.9	0.0	3145.9
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	9615.1	0.0	9615.1
	% Fixture	75.3	0.0	75.3
Total	Lumens	12761.0	0.0	12761.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.6	1.4
10°-20°	507.5	4.0
20°-30°	849.0	6.7
30°-40°	1326.4	10.4
40°-50°	2112.5	16.6
50°-60°	2939.7	23.0
60°-70°	3075.1	24.1
70°-80°	1607.2	12.6
80°-90°	166.9	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°	12761.0	100.0
0°-180°	12761.0	100.0

Coefficient of Utilization



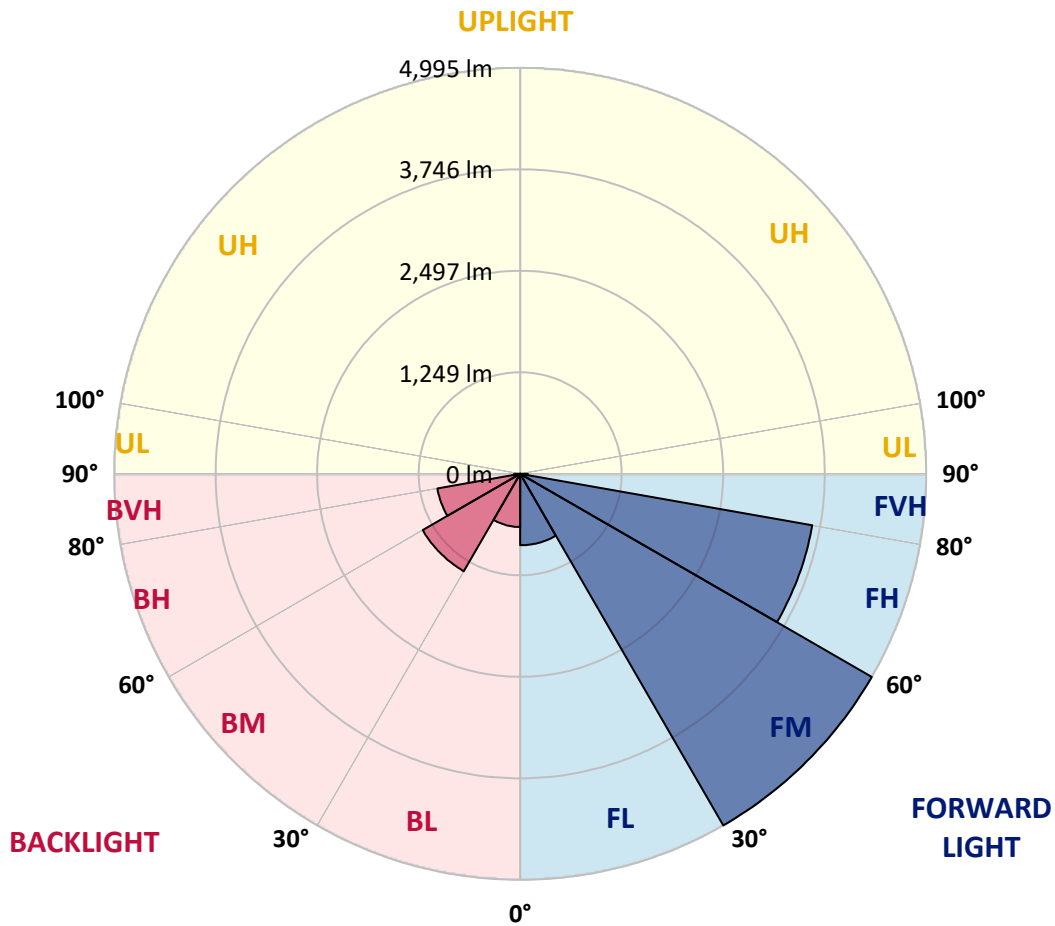
REPORT NUMBER: P882637
 CATALOG NUMBER: NAV-SB2C-835-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	878.7	6.9			
FM (30°-60°)	4994.5	39.1			
FH (60°-80°)	3648.4	28.6			G2/5000
FVH (80°-90°)	93.4	0.7			G1/100
BL (0°-30°)	654.5	5.1	B2/1000		
BM (30°-60°)	1384.1	10.8	B2/2500		
BH (60°-80°)	1033.9	8.1	B3/2500		G3/2500
BVH (80°-90°)	73.5	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: P882637

CATALOG NUMBER: NAV-SB2C-835-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1870.9	1870.9	1870.9	1870.9	1870.9	1870.9	1870.9	1870.9	1870.9	1870.9	1870.9
2.5°	1915.6	1926.4	1923.1	1919.7	1919.7	1914.9	1914.3	1907.5	1902.1	1893.3	1891.2
5°	1940.0	1951.5	1950.1	1952.9	1961.7	1963.7	1965.7	1961.7	1950.8	1940.0	1935.2
7.5°	1918.3	1931.2	1935.2	1951.5	1978.6	2003.0	2021.2	2028.7	2018.5	2003.0	1995.5
10°	1845.2	1859.4	1873.6	1912.2	1960.3	2017.9	2066.6	2095.7	2093.7	2078.8	2065.9
12.5°	1696.9	1711.8	1742.3	1817.4	1905.5	2007.0	2097.8	2158.7	2179.7	2168.9	2146.5
15°	1578.4	1591.3	1614.3	1691.5	1805.9	1960.3	2109.3	2227.8	2281.3	2275.2	2248.1
17.5°	1575.0	1580.4	1594.7	1631.2	1719.2	1887.2	2097.1	2295.5	2397.7	2397.1	2363.2
20°	1634.6	1636.6	1644.8	1652.2	1702.3	1831.6	2065.9	2351.7	2528.4	2528.4	2491.9
22.5°	1717.2	1715.9	1724.0	1717.2	1741.6	1826.9	2046.3	2401.1	2674.0	2684.8	2638.8
25°	1841.1	1834.4	1832.3	1816.8	1821.5	1870.9	2068.0	2457.3	2846.7	2869.0	2811.5
27.5°	2006.3	1995.5	1988.1	1952.2	1940.0	1961.7	2134.3	2525.0	3039.0	3077.6	3004.4
30°	2221.7	2202.0	2191.2	2128.9	2084.9	2088.3	2234.5	2615.1	3240.1	3302.4	3209.6
32.5°	2515.6	2485.1	2456.0	2353.7	2273.1	2246.7	2363.9	2739.7	3458.1	3557.7	3438.5
35°	2844.6	2820.3	2789.1	2631.3	2507.4	2446.5	2538.6	2913.7	3713.4	3871.2	3716.1
37.5°	3161.5	3140.5	3155.4	2942.8	2783.0	2694.3	2767.4	3147.3	4028.3	4261.2	4064.2
40°	3489.3	3473.0	3475.1	3271.9	3085.7	2986.2	3045.1	3440.5	4389.2	4725.0	4482.6
42.5°	3845.4	3833.3	3792.6	3612.5	3403.3	3310.5	3364.7	3779.1	4776.5	5253.2	4941.7
45°	4244.3	4236.8	4198.9	3992.4	3752.7	3648.4	3721.5	4152.9	5165.9	5750.2	5402.9
47.5°	4588.9	4595.0	4590.3	4416.3	4167.8	4014.7	4102.1	4542.9	5528.1	6217.4	5845.0
50°	4754.8	4786.7	4833.4	4779.2	4624.8	4469.1	4486.0	4919.4	5873.5	6655.6	6268.9
52.5°	4668.2	4728.4	4855.7	4942.4	5002.0	4969.5	4924.1	5293.2	6198.5	7051.0	6669.8
55°	4345.2	4429.8	4641.1	4850.3	5154.3	5390.7	5450.3	5707.6	6515.4	7399.0	7049.0
57.5°	3756.7	3894.2	4083.8	4507.0	5018.9	5594.5	6063.7	6282.5	6851.2	7770.8	7445.8
60°	2747.8	2932.0	3167.6	3797.4	4544.9	5485.5	6585.8	7165.4	7328.6	8252.2	7962.4
62.5°	1758.5	1872.3	2089.0	2682.1	3541.4	4926.8	6745.6	8269.2	8137.8	9041.8	8737.1
65°	1203.9	1277.1	1475.5	1808.6	2289.4	3667.4	6317.7	9096.6	9423.0	10293.1	10061.5
67.5°	874.9	930.4	1099.7	1391.5	1491.7	2170.2	4902.5	9058.7	10672.3	11582.4	11222.1
70°	637.9	677.1	819.3	1099.7	1147.7	1207.3	2969.9	7700.4	10645.2	11925.0	11493.7
72.5°	472.6	499.7	595.2	853.2	929.0	815.3	1470.1	5596.5	9147.4	10786.1	10440.1
75°	342.0	362.3	432.7	652.8	743.5	620.9	733.3	3270.6	6380.6	7587.3	7648.2
77.5°	261.4	276.9	323.0	478.1	595.2	465.9	455.0	1504.6	3025.4	3040.3	3211.0
80°	209.9	220.1	245.1	336.5	456.4	348.7	296.6	607.4	956.1	809.2	849.1
82.5°	154.4	171.3	207.2	236.3	326.4	240.4	180.8	306.7	363.6	312.8	315.5
85°	88.0	99.5	125.3	169.3	208.6	146.9	103.6	136.1	169.3	138.8	123.9
87.5°	31.1	40.6	44.0	66.4	90.7	60.9	40.0	39.3	55.5	41.3	34.5
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: P882637
 CATALOG NUMBER: NAV-SB2C-835-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1870.9	1870.9	1870.9	1870.9	1870.9	1870.9	1870.9	1870.9	1870.9	1870.9	1870.9
2.5°	1884.5	1881.1	1867.5	1849.3	1830.3	1812.0	1805.9	1793.1	1784.2	1779.5	1784.9
5°	1922.4	1911.6	1879.7	1839.1	1796.4	1750.4	1717.9	1688.1	1666.4	1646.1	1654.2
7.5°	1976.6	1957.6	1902.7	1831.6	1755.8	1679.3	1622.4	1579.1	1550.0	1531.0	1535.1
10°	2039.5	2010.4	1926.4	1820.1	1703.0	1593.3	1526.3	1489.0	1470.7	1460.6	1463.3
12.5°	2112.0	2070.7	1950.8	1793.7	1622.4	1497.1	1451.1	1440.3	1440.9	1441.6	1443.0
15°	2201.4	2143.8	1970.5	1736.2	1517.5	1423.3	1415.2	1432.8	1451.1	1459.9	1459.2
17.5°	2302.3	2221.0	1973.8	1641.4	1414.5	1375.9	1401.7	1439.6	1467.4	1479.5	1482.2
20°	2410.6	2299.5	1949.5	1507.3	1329.9	1337.3	1383.4	1432.1	1462.6	1478.2	1482.2
22.5°	2534.5	2383.5	1891.2	1366.5	1260.8	1295.4	1349.5	1396.9	1428.8	1444.3	1448.4
25°	2676.0	2477.6	1799.8	1248.0	1201.2	1248.0	1302.1	1341.4	1367.1	1381.4	1385.4
27.5°	2833.1	2575.8	1677.9	1153.8	1149.1	1199.2	1243.9	1274.4	1287.9	1298.7	1302.8
30°	2990.9	2665.2	1530.3	1082.7	1103.7	1151.1	1183.0	1196.5	1200.6	1202.6	1207.3
32.5°	3161.5	2742.4	1375.3	1023.8	1060.4	1104.4	1123.4	1129.5	1110.5	1097.6	1101.7
35°	3368.1	2825.0	1223.6	977.1	1017.7	1055.7	1061.7	1056.3	1034.0	1007.6	1008.9
37.5°	3623.3	2927.9	1102.4	943.9	977.8	1002.8	995.4	994.0	996.1	964.9	966.9
40°	3936.2	3062.0	1013.7	918.2	945.3	950.7	929.7	941.2	951.4	904.0	905.3
42.5°	4283.6	3223.8	957.5	900.6	918.2	905.3	872.8	885.7	884.3	822.0	821.4
45°	4637.7	3399.9	937.8	887.7	893.1	867.4	831.5	834.9	806.5	750.3	752.3
47.5°	4989.8	3588.8	950.0	876.9	862.0	832.9	805.1	790.2	748.2	706.3	706.3
50°	5335.1	3787.2	994.7	855.2	819.3	802.4	782.1	755.7	711.0	675.1	672.4
52.5°	5655.4	3987.0	1044.8	819.3	765.8	776.0	763.1	732.7	688.6	652.1	652.8
55°	5958.8	4186.7	1064.5	769.9	715.7	753.0	745.5	689.3	636.5	606.7	604.0
57.5°	6289.2	4427.1	1042.8	706.9	675.1	726.6	698.1	635.8	605.4	583.0	581.0
60°	6747.0	4804.3	996.1	629.1	636.5	687.3	638.5	612.8	579.6	554.6	553.2
62.5°	7507.4	5507.8	920.9	551.9	591.1	629.1	610.1	584.4	550.5	526.1	526.1
65°	8631.4	6485.6	779.4	491.6	540.4	572.2	579.6	553.9	518.7	493.0	494.3
67.5°	9579.4	7099.1	589.8	441.5	488.2	526.1	547.1	522.1	484.8	459.8	460.5
70°	9527.3	6653.5	450.3	392.1	442.2	480.8	507.9	488.2	448.3	424.6	426.6
72.5°	8462.1	5566.0	364.3	342.0	395.4	433.4	465.9	451.0	410.3	387.3	387.3
75°	6216.8	3951.1	291.2	291.2	337.2	383.9	419.8	410.3	373.1	356.8	352.1
77.5°	2620.5	1657.6	228.2	241.7	280.3	329.8	374.5	377.8	345.3	365.7	331.8
80°	696.8	457.1	174.0	190.3	220.1	272.2	325.7	324.3	289.1	270.2	251.2
82.5°	265.4	180.1	123.9	134.1	159.1	208.6	258.0	266.1	230.9	199.8	199.8
85°	102.2	77.2	76.5	80.6	92.8	138.1	195.0	201.8	174.0	147.6	152.4
87.5°	26.4	23.0	28.4	27.1	42.7	73.8	111.7	115.8	106.3	61.6	88.0
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)