

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: P883089

Luminaire Tested: **NAV-SB3B-735-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883089  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3B-735-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

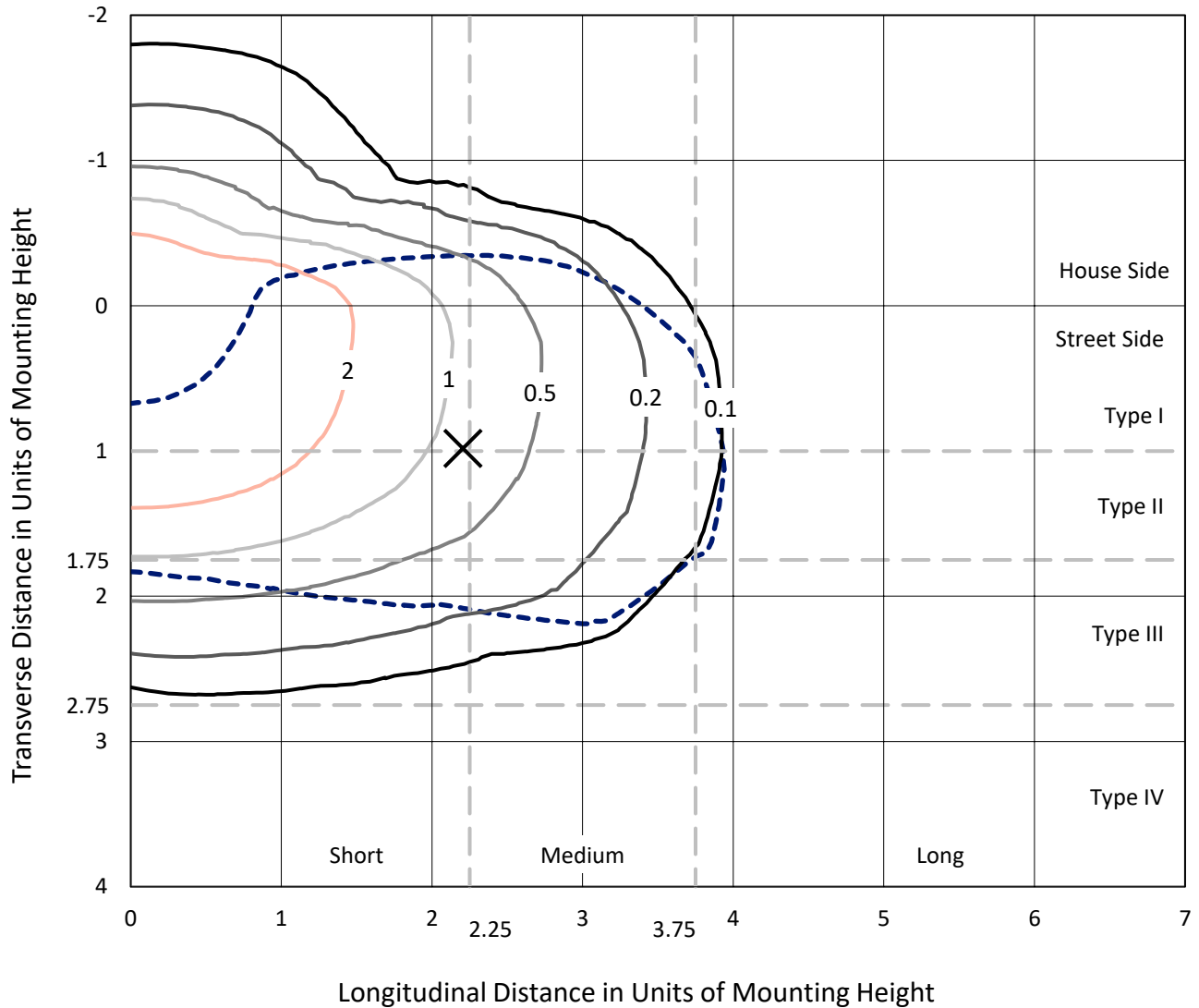
Lumens per Lamp: N/A  
Luminaire Lumens: 16902 lumens  
Efficiency: N/A  
Efficacy: 154.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 109.2  
Input Voltage (V): 120.0  
Input Current (Ain): 0.919  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 8.657  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P883089  
 CATALOG NUMBER: NAV-SB3B-735-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

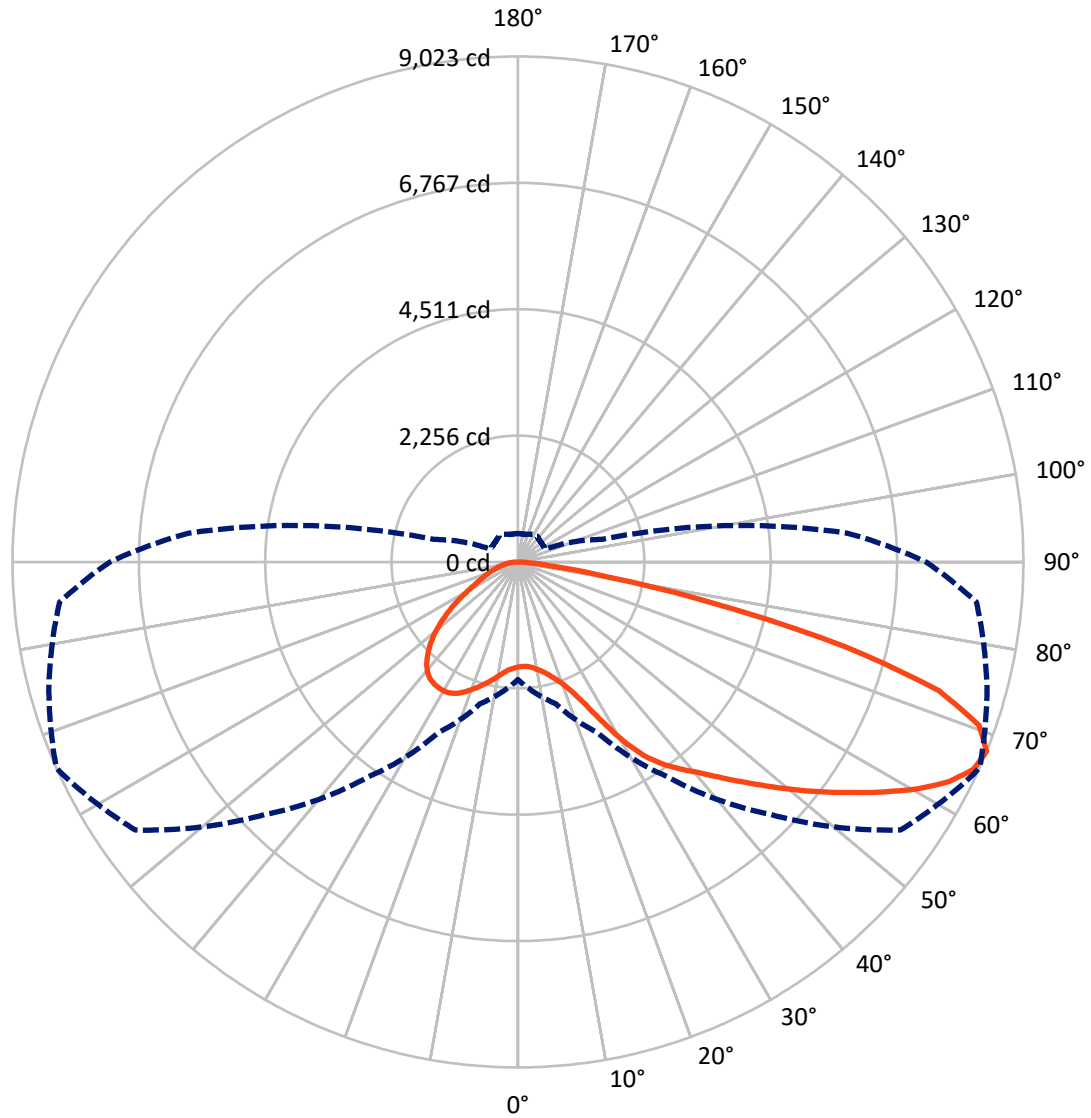
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc  
 Type III - Short - N/A

REPORT NUMBER: P883089  
CATALOG NUMBER: NAV-SB3B-735-U-T3

### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P883089  
 CATALOG NUMBER: NAV-SB3B-735-U-T3

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4202.6	0.0	4202.6
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	12699.4	0.0	12699.4
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	16902.0	0.0	16902.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.9	1.1
10°-20°	614.1	3.6
20°-30°	1183.6	7.0
30°-40°	2075.3	12.3
40°-50°	3085.2	18.3
50°-60°	3910.9	23.1
60°-70°	3826.7	22.6
70°-80°	1825.4	10.8
80°-90°	195.1	1.2
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°	16902.0	100.0
0°-180°	16902.0	100.0

**Coefficient of Utilization**



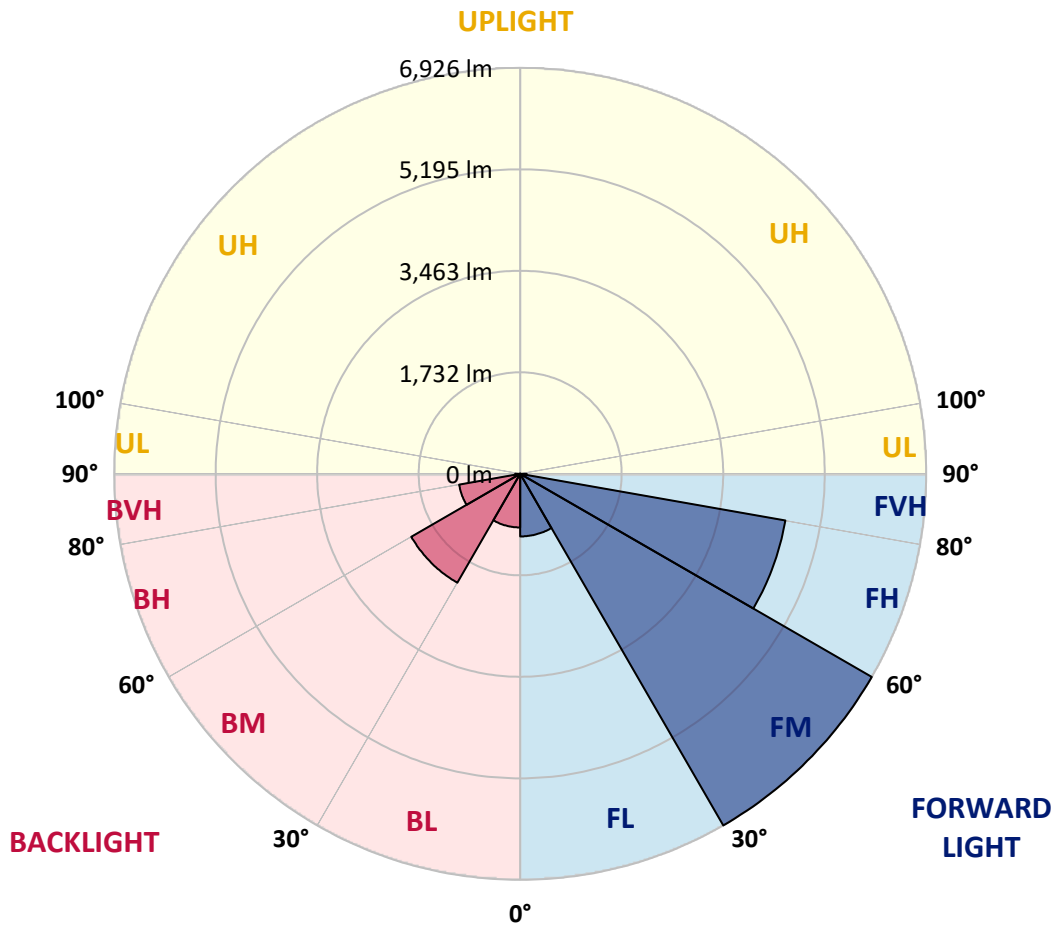
REPORT NUMBER: P883089  
 CATALOG NUMBER: NAV-SB3B-735-U-T3

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1068.0	6.3			
FM (30°-60°)	6926.3	41.0			
FH (60°-80°)	4594.4	27.2			G2/5000
FVH (80°-90°)	110.6	0.7			G2/225
BL (0°-30°)	915.5	5.4	B2/1000		
BM (30°-60°)	2145.1	12.7	B2/2500		
BH (60°-80°)	1057.6	6.3	B3/2500		G3/2500
BVH (80°-90°)	84.5	0.5			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 III Short



REPORT NUMBER: P883089

CATALOG NUMBER: NAV-SB3B-735-U-T3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1874.7	1874.7	1874.7	1874.7	1874.7	1874.7	1874.7	1874.7	1874.7	1874.7	1874.7
2.5°	1855.1	1865.8	1863.1	1858.7	1857.8	1859.6	1862.2	1864.9	1864.0	1868.4	1875.5
5°	1849.8	1860.4	1859.6	1859.6	1863.1	1870.2	1874.7	1879.1	1874.7	1880.0	1889.8
7.5°	1853.3	1861.3	1864.9	1868.4	1877.3	1890.6	1901.3	1911.1	1905.7	1912.0	1924.4
10°	1898.6	1904.8	1908.4	1908.4	1914.6	1929.7	1940.4	1958.1	1953.7	1963.5	1979.4
12.5°	1981.2	1987.4	1987.4	1983.9	1988.3	1998.1	2001.6	2021.2	2013.2	2029.2	2045.2
15°	2082.5	2094.9	2085.1	2078.9	2080.7	2090.4	2089.6	2104.7	2096.7	2110.0	2124.2
17.5°	2194.4	2210.3	2194.4	2193.5	2189.9	2200.6	2201.5	2214.8	2200.6	2210.3	2220.1
20°	2326.7	2348.9	2335.5	2340.0	2332.0	2336.4	2340.9	2360.4	2338.2	2345.3	2342.7
22.5°	2513.2	2539.8	2525.6	2542.5	2537.1	2533.6	2532.7	2567.3	2532.7	2535.4	2509.6
25°	2784.9	2816.9	2792.0	2815.1	2815.1	2826.6	2840.0	2884.4	2826.6	2809.8	2743.2
27.5°	3186.3	3218.3	3169.4	3183.6	3179.2	3207.6	3193.4	3303.5	3241.4	3213.8	3079.7
30°	3669.4	3726.2	3633.9	3630.3	3625.9	3671.2	3691.6	3764.4	3701.4	3673.8	3512.2
32.5°	4191.6	4251.1	4140.9	4109.0	4092.1	4119.6	4102.8	4161.4	4117.8	4075.2	3875.4
35°	4743.9	4802.5	4697.7	4635.6	4568.1	4510.4	4450.0	4465.1	4424.2	4359.4	4152.5
37.5°	5266.1	5373.5	5262.5	5195.9	5071.6	4958.8	4790.1	4719.9	4681.8	4622.3	4413.6
40°	5798.0	5859.3	5774.9	5718.1	5583.1	5406.4	5136.4	4988.1	4936.6	4878.9	4702.2
42.5°	6189.6	6248.3	6203.0	6163.9	6058.2	5853.1	5504.1	5318.5	5243.9	5179.1	5029.0
45°	6500.5	6544.0	6515.6	6529.8	6484.5	6285.6	5885.0	5672.8	5595.5	5516.5	5398.4
47.5°	6625.7	6671.9	6717.1	6801.5	6878.8	6732.2	6294.4	6056.4	5974.7	5893.9	5777.6
50°	6611.5	6658.5	6790.0	6969.3	7209.1	7160.3	6726.0	6464.9	6389.5	6297.1	6189.6
52.5°	6497.8	6551.1	6719.8	7018.2	7400.0	7480.9	7165.6	6886.8	6815.7	6705.6	6598.1
55°	6199.4	6231.4	6484.5	6907.2	7445.3	7704.6	7596.3	7336.1	7265.1	7111.4	6994.2
57.5°	5646.2	5692.3	6060.9	6607.9	7331.7	7856.5	7974.6	7808.5	7740.2	7519.0	7396.5
60°	4924.2	4997.9	5419.7	6105.3	7042.2	7855.6	8318.3	8273.0	8216.2	7920.4	7792.6
62.5°	4107.2	4192.4	4598.3	5394.9	6536.0	7632.7	8533.2	8662.0	8632.6	8290.8	8127.4
65°	3154.3	3212.9	3617.0	4475.7	5748.3	7154.1	8558.1	8927.5	8932.8	8572.3	8302.3
67.5°	2100.2	2268.9	2619.7	3358.6	4693.3	6371.7	8339.6	8971.0	9022.5	8669.1	8214.4
70°	1024.8	1246.8	1590.5	2182.8	3358.6	5172.0	7768.6	8614.0	8728.6	8386.7	7690.4
72.5°	425.4	497.3	684.7	1077.2	1927.9	3490.0	6621.2	7646.0	7858.3	7431.1	6465.8
75°	286.8	310.8	391.6	552.4	878.3	1721.0	4775.0	5701.2	6043.1	5612.4	4587.6
77.5°	221.1	236.2	285.1	386.3	522.2	650.9	2555.8	3435.8	3612.6	3344.4	2387.1
80°	174.1	185.6	213.1	281.5	370.3	348.1	871.2	1556.7	1658.9	1391.6	767.3
82.5°	151.0	155.4	152.7	190.9	246.0	203.4	285.9	574.6	634.1	460.0	250.4
85°	109.2	121.7	127.0	118.1	130.5	103.0	117.2	203.4	223.8	199.8	141.2
87.5°	44.4	65.7	80.8	76.4	48.0	29.3	36.4	59.5	68.4	74.6	46.2
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: P883089  
 CATALOG NUMBER: NAV-SB3B-735-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1874.7	1874.7	1874.7	1874.7	1874.7	1874.7	1874.7	1874.7	1874.7	1874.7	1874.7
2.5°	1876.4	1882.6	1887.1	1892.4	1896.0	1901.3	1912.0	1918.2	1919.1	1923.5	1922.6
5°	1893.3	1902.2	1912.0	1926.2	1942.1	1955.5	1975.9	1990.1	1995.4	1999.9	1999.0
7.5°	1929.7	1942.1	1959.9	1984.8	2007.9	2025.6	2050.5	2067.4	2084.2	2090.4	2091.3
10°	1983.9	2001.6	2027.4	2061.1	2086.0	2109.1	2134.9	2149.1	2165.9	2173.0	2176.6
12.5°	2051.4	2070.0	2103.8	2150.8	2173.9	2189.9	2198.8	2195.2	2198.8	2205.0	2206.8
15°	2128.6	2149.1	2187.2	2237.9	2253.8	2239.6	2220.1	2202.3	2199.7	2201.5	2207.7
17.5°	2220.1	2235.2	2279.6	2322.2	2310.7	2252.1	2209.4	2181.0	2166.8	2162.4	2168.6
20°	2348.0	2348.0	2384.4	2411.0	2333.8	2234.3	2167.7	2121.5	2092.2	2079.8	2077.1
22.5°	2503.4	2489.2	2512.3	2493.6	2329.3	2184.6	2092.2	2012.3	1967.9	1950.1	1947.5
25°	2700.5	2683.7	2677.4	2562.0	2297.4	2105.5	1955.5	1858.7	1819.6	1809.8	1811.6
27.5°	2998.0	2955.4	2874.6	2599.3	2238.8	1981.2	1795.6	1705.9	1683.7	1684.6	1687.3
30°	3394.1	3308.8	3110.8	2605.5	2142.8	1805.4	1632.2	1568.3	1557.6	1562.1	1577.2
32.5°	3760.9	3680.0	3352.4	2577.1	1995.4	1633.1	1485.7	1443.1	1427.1	1432.4	1439.5
35°	4048.6	4026.4	3576.1	2537.1	1814.3	1471.5	1354.3	1317.9	1286.8	1279.7	1285.0
37.5°	4320.3	4311.4	3744.0	2481.2	1634.9	1356.9	1248.6	1200.6	1155.3	1130.5	1131.4
40°	4618.7	4609.8	3854.1	2395.0	1475.9	1257.5	1153.6	1090.5	1034.6	989.3	993.7
42.5°	4954.4	4902.0	3906.5	2271.6	1340.9	1173.1	1076.3	991.1	917.3	875.6	878.3
45°	5321.1	5203.0	3905.6	2114.4	1227.3	1095.8	993.7	872.9	804.6	765.5	763.7
47.5°	5710.1	5490.8	3857.7	1940.4	1117.2	1010.6	865.8	773.5	728.2	704.2	698.9
50°	6111.5	5759.8	3776.0	1740.6	1004.4	913.8	785.9	722.9	688.2	666.0	658.0
52.5°	6488.9	6004.0	3677.4	1514.1	889.8	819.7	750.4	701.6	665.1	640.3	629.6
55°	6839.7	6214.5	3538.0	1282.3	796.6	756.6	733.5	692.7	650.9	621.6	610.1
57.5°	7151.4	6351.3	3297.3	1064.8	730.0	713.1	715.8	677.6	629.6	604.8	588.8
60°	7410.7	6451.6	2941.2	863.2	675.8	670.5	688.2	649.2	593.2	564.8	552.4
62.5°	7566.1	6449.8	2504.3	706.9	629.6	631.4	651.8	613.6	556.8	530.2	522.2
65°	7552.8	6291.8	2024.7	604.8	585.2	587.0	613.6	574.6	526.6	510.6	509.7
67.5°	7285.5	5906.4	1553.2	538.2	536.4	544.4	575.5	547.9	508.0	506.2	508.8
70°	6561.7	5106.2	1118.9	484.9	485.8	497.3	538.2	531.0	498.2	501.7	500.9
72.5°	5261.6	3893.2	751.3	428.9	429.8	448.5	502.6	517.7	488.4	535.5	542.6
75°	3504.2	2427.9	483.1	369.4	370.3	394.3	471.5	492.0	461.8	533.7	538.2
77.5°	1683.7	1091.4	349.9	310.8	310.8	333.0	407.6	440.5	393.4	414.7	380.1
80°	581.7	410.3	275.3	250.4	245.1	260.2	343.7	381.9	339.2	312.6	293.1
82.5°	229.1	213.1	221.1	194.5	176.7	186.5	267.3	315.3	249.5	225.6	224.7
85°	131.4	138.5	156.3	128.8	102.1	114.6	196.3	226.5	188.3	166.1	169.6
87.5°	35.5	48.8	71.9	66.6	46.2	48.8	93.2	125.2	108.3	83.5	86.1
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)