

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: P882748

Luminaire Tested: **NAV-SB2D-735-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882748
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2D-735-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16265 lumens
Efficiency: N/A
Efficacy: 110.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 147.6
Input Voltage (V): 120.0
Input Current (Ain): 1.234
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 3.108
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

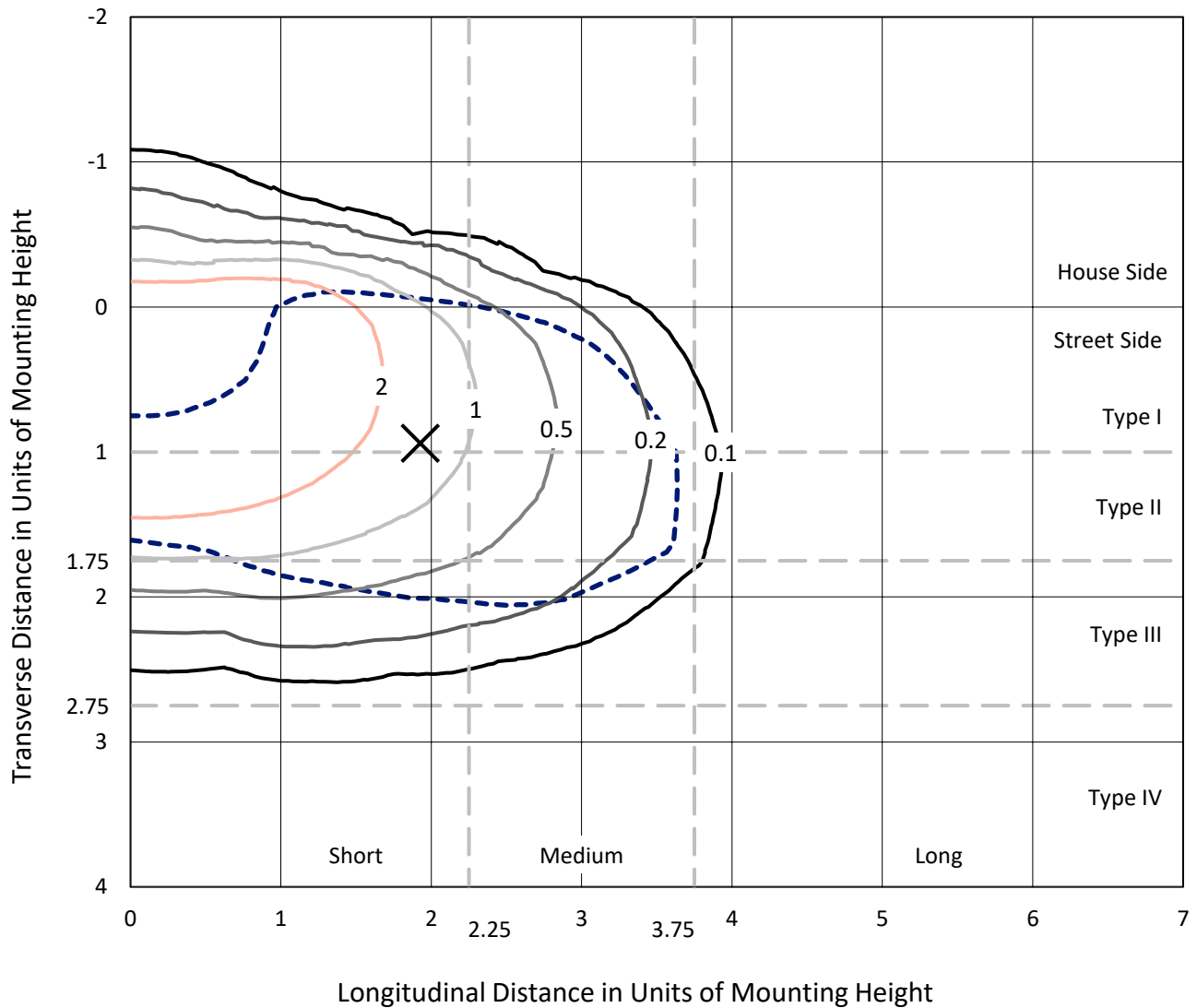


REPORT NUMBER: P882748

CATALOG NUMBER: NAV-SB2D-735-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

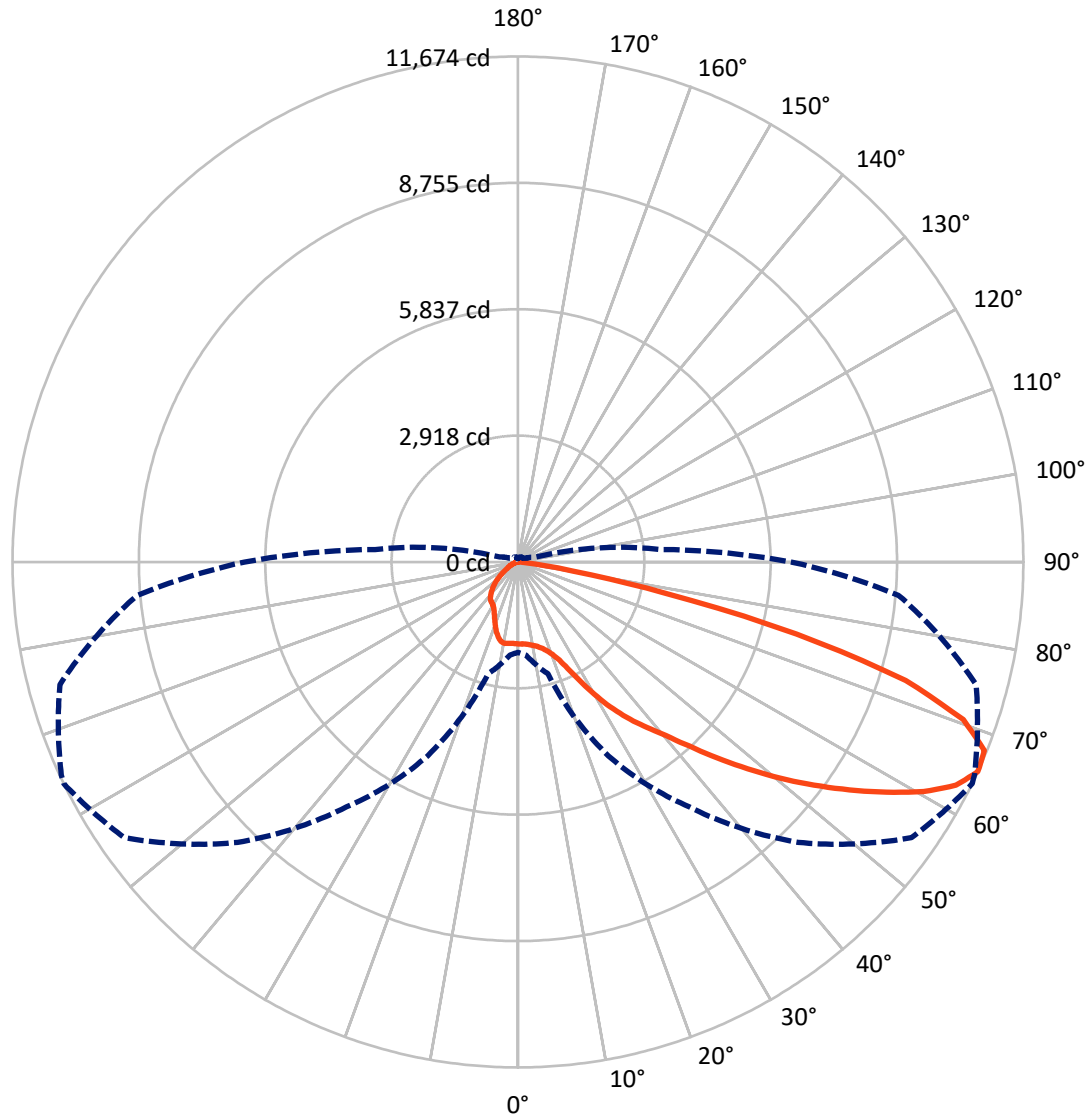
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc
 Type III - Short - N/A

REPORT NUMBER: P882748
CATALOG NUMBER: NAV-SB2D-735-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P882748

CATALOG NUMBER: NAV-SB2D-735-U-T3-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2175.1	0.0	2175.1
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	14089.9	0.0	14089.9
	% Fixture	86.6	0.0	86.6
Total	Lumens	16265.0	0.0	16265.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.5	1.1
10°-20°	473.4	2.9
20°-30°	897.0	5.5
30°-40°	1815.2	11.2
40°-50°	3092.2	19.0
50°-60°	4205.1	25.9
60°-70°	3948.8	24.3
70°-80°	1582.1	9.7
80°-90°	76.6	0.5
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°	16265.0	100.0
0°-180°	16265.0	100.0

Coefficient of Utilization



REPORT NUMBER: P882748

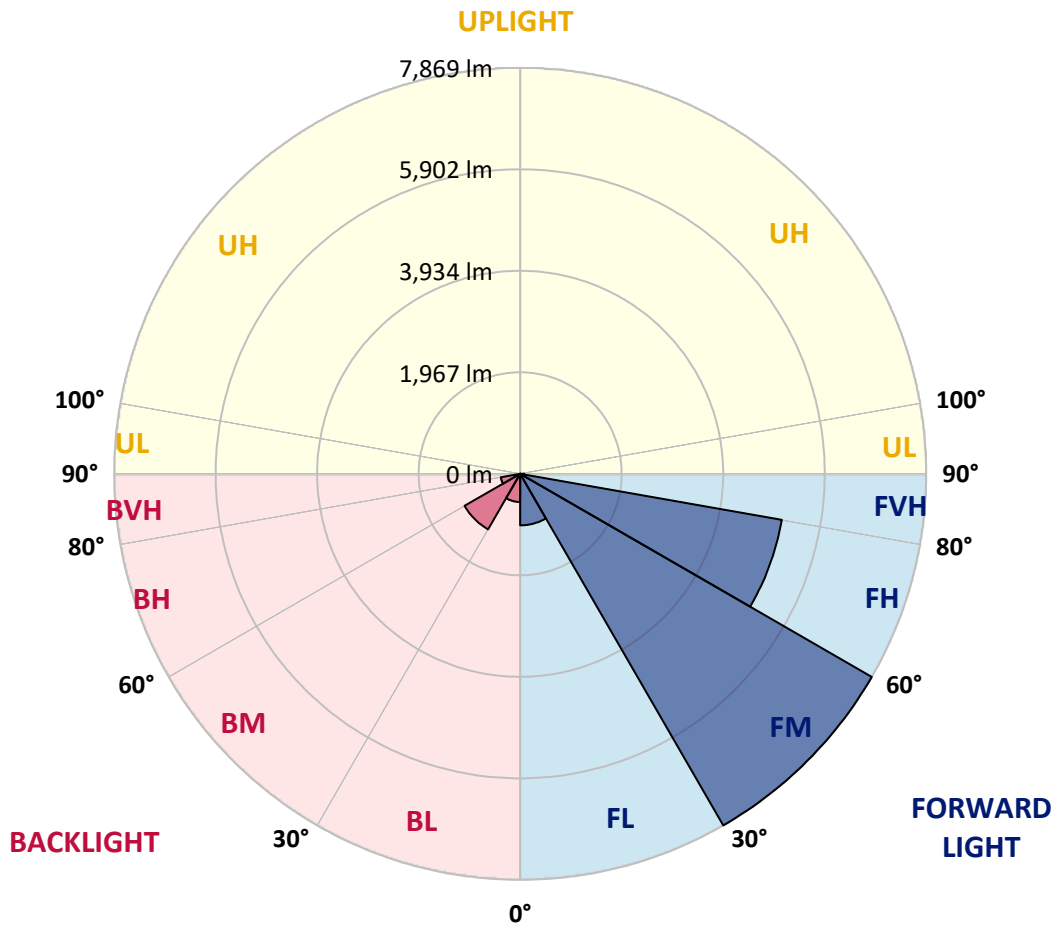
CATALOG NUMBER: NAV-SB2D-735-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	998.9	6.1			
FM (30°-60°)	7869.0	48.4			
FH (60°-80°)	5149.1	31.7			G3/7500
FVH (80°-90°)	72.9	0.4			G1/100
BL (0°-30°)	546.1	3.4	B2/1000		
BM (30°-60°)	1243.5	7.6	B2/2500		
BH (60°-80°)	381.8	2.3	B1/500		G1/500
BVH (80°-90°)	3.7	0.0			G0/10
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: P882748

CATALOG NUMBER: NAV-SB2D-735-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1891.8	1891.8	1891.8	1891.8	1891.8	1891.8	1891.8	1891.8	1891.8	1891.8	1891.8
2.5°	1885.2	1898.3	1895.1	1891.8	1890.7	1892.9	1894.0	1892.9	1892.9	1892.9	1894.0
5°	1849.3	1860.2	1860.2	1867.8	1878.7	1891.8	1901.6	1903.8	1906.0	1909.2	1908.1
7.5°	1780.6	1789.3	1795.8	1820.9	1848.2	1883.1	1912.5	1927.8	1930.0	1941.9	1946.3
10°	1733.7	1744.6	1755.5	1781.7	1820.9	1873.3	1923.4	1960.5	1965.9	1994.3	2007.4
12.5°	1731.5	1742.4	1756.6	1784.9	1830.7	1886.3	1947.4	2000.8	2010.6	2052.1	2079.3
15°	1754.4	1767.5	1780.6	1815.5	1864.5	1932.1	1997.6	2064.1	2073.9	2132.8	2162.2
17.5°	1801.3	1818.7	1828.5	1863.4	1915.8	1991.0	2077.2	2153.5	2162.2	2230.9	2268.0
20°	1894.0	1914.7	1918.0	1946.3	1997.6	2078.2	2180.7	2275.6	2286.5	2365.0	2406.4
22.5°	2085.9	2115.3	2089.1	2103.3	2149.1	2229.8	2341.0	2461.0	2476.2	2565.6	2602.7
25°	2423.9	2465.3	2397.7	2373.7	2393.4	2477.3	2616.9	2768.4	2785.9	2857.9	2876.4
27.5°	3087.9	3034.5	2932.0	2831.7	2772.8	2820.8	2977.8	3165.3	3187.1	3256.9	3235.1
30°	3817.4	3770.5	3632.0	3409.6	3270.0	3262.4	3407.4	3616.8	3641.8	3708.3	3641.8
32.5°	4547.9	4503.2	4352.7	4079.1	3837.0	3717.1	3817.4	4049.6	4062.7	4105.2	4007.1
35°	5266.5	5220.7	5070.2	4790.0	4492.3	4219.7	4200.1	4461.8	4466.1	4510.9	4364.7
37.5°	5989.4	5951.2	5790.9	5516.2	5222.9	4846.7	4664.6	4852.1	4857.6	4901.2	4749.6
40°	6505.1	6521.5	6411.4	6198.7	5946.9	5535.8	5185.8	5267.6	5234.9	5307.9	5217.4
42.5°	6947.8	6980.5	6884.6	6777.7	6631.6	6269.6	5831.3	5817.1	5764.8	5804.0	5710.3
45°	7330.5	7357.8	7271.7	7246.6	7243.3	6989.3	6536.8	6451.7	6378.7	6371.0	6258.7
47.5°	7471.2	7523.5	7560.6	7644.6	7808.1	7701.3	7266.2	7134.3	7052.5	6992.5	6814.8
50°	7524.6	7580.2	7706.7	7951.0	8338.0	8383.8	7992.4	7844.1	7743.8	7634.8	7373.1
52.5°	7452.7	7551.9	7722.0	8133.1	8694.6	8931.2	8689.1	8559.4	8444.9	8267.2	7879.0
55°	7028.5	7127.7	7475.6	8130.9	8872.3	9315.0	9347.7	9289.9	9161.3	8881.0	8287.9
57.5°	6134.4	6281.6	6832.2	7853.9	8869.1	9645.4	9993.2	10034.7	9890.7	9489.5	8609.5
60°	4895.8	5095.3	5767.0	7240.0	8595.4	9824.2	10559.1	10766.3	10613.6	10089.2	8870.1
62.5°	3416.1	3647.3	4283.0	6278.3	7969.5	9695.6	10972.4	11355.1	11239.5	10625.6	8970.5
65°	2083.7	2157.8	2670.3	4940.5	6905.3	9156.9	11099.9	11673.5	11635.3	10953.8	8822.2
67.5°	1388.0	1450.2	1597.4	3387.8	5360.2	8080.7	10794.6	11617.9	11628.8	10900.4	8279.2
70°	836.3	889.7	985.7	1970.3	3473.9	6396.1	9849.3	10909.1	10972.4	10186.2	7249.9
72.5°	344.6	380.5	467.8	893.0	1799.1	4059.4	7843.0	9366.3	9513.5	8564.8	5564.1
75°	195.2	213.7	274.8	448.1	780.7	1891.8	4750.7	6649.1	6866.0	5903.3	3347.4
77.5°	129.8	138.5	177.7	290.0	439.4	645.5	2030.3	3464.1	3878.4	3224.2	1449.1
80°	87.2	94.9	122.1	194.1	285.7	277.0	646.6	1283.4	1578.9	1107.8	353.3
82.5°	58.9	60.0	87.2	127.6	181.0	134.1	190.8	399.1	501.6	320.6	134.1
85°	33.8	32.7	64.3	74.1	80.7	55.6	57.8	119.9	157.0	135.2	76.3
87.5°	4.4	6.5	25.1	19.6	10.9	12.0	12.0	20.7	30.5	32.7	16.4
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: P882748

CATALOG NUMBER: NAV-SB2D-735-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1891.8	1891.8	1891.8	1891.8	1891.8	1891.8	1891.8	1891.8	1891.8	1891.8	1891.8
2.5°	1894.0	1892.9	1889.6	1886.3	1878.7	1874.3	1876.5	1874.3	1873.3	1874.3	1878.7
5°	1908.1	1904.9	1896.1	1885.2	1870.0	1851.4	1839.5	1822.0	1805.6	1795.8	1798.0
7.5°	1946.3	1943.0	1931.0	1900.5	1851.4	1774.0	1703.2	1641.0	1594.1	1566.9	1567.9
10°	2007.4	2001.9	1983.4	1915.8	1787.1	1618.1	1477.4	1360.8	1284.5	1248.5	1245.2
12.5°	2079.3	2072.8	2040.1	1901.6	1665.0	1401.1	1207.0	1077.3	1006.4	974.8	971.5
15°	2164.4	2155.7	2091.3	1834.0	1487.3	1161.2	983.5	886.5	840.7	812.3	813.4
17.5°	2270.1	2254.9	2129.5	1732.6	1294.3	978.1	846.1	773.1	732.7	705.5	703.3
20°	2407.5	2382.5	2160.0	1611.6	1116.5	862.5	753.4	692.4	661.9	637.9	633.5
22.5°	2599.4	2563.5	2197.1	1480.7	991.1	782.9	684.8	640.0	615.0	587.7	583.3
25°	2837.1	2794.6	2242.9	1359.7	905.0	714.2	634.6	597.5	568.1	536.5	533.2
27.5°	3169.7	3093.4	2297.4	1260.5	830.9	655.3	588.8	547.4	513.6	487.4	481.9
30°	3540.4	3415.0	2345.4	1200.5	763.3	600.8	528.8	487.4	455.8	437.2	434.0
32.5°	3891.5	3721.4	2377.0	1174.3	702.2	538.6	463.4	418.7	394.7	389.3	392.5
35°	4223.0	3998.4	2373.7	1149.2	647.7	476.5	399.1	353.3	334.7	338.0	338.0
37.5°	4604.6	4293.9	2350.8	1110.0	603.0	419.8	343.5	303.1	286.8	287.9	292.2
40°	5048.4	4635.2	2336.7	1035.8	553.9	367.5	297.7	265.0	253.0	248.6	247.5
42.5°	5521.6	4965.5	2338.8	951.9	492.8	320.6	266.0	238.8	227.9	224.6	223.5
45°	5997.0	5280.7	2342.1	864.7	428.5	284.6	243.2	220.3	213.7	209.4	209.4
47.5°	6444.1	5548.9	2281.0	770.9	365.3	257.3	224.6	209.4	203.9	198.4	198.4
50°	6860.6	5727.7	2133.9	661.9	315.1	235.5	210.4	199.5	194.1	188.6	188.6
52.5°	7184.4	5756.1	1890.7	549.5	280.2	219.2	201.7	191.9	185.4	179.9	178.8
55°	7328.4	5578.3	1545.1	444.9	253.0	205.0	193.0	183.2	175.5	170.1	169.0
57.5°	7291.3	5204.3	1204.9	357.6	226.8	190.8	182.1	175.5	166.8	158.1	157.0
60°	7109.2	4703.8	908.3	297.7	202.8	175.5	170.1	164.6	152.7	139.6	137.4
62.5°	6794.1	4074.7	647.7	246.4	176.6	158.1	155.9	151.6	134.1	110.1	107.9
65°	6312.1	3310.4	436.1	205.0	151.6	138.5	139.6	131.9	109.0	81.8	79.6
67.5°	5607.8	2420.6	279.1	167.9	126.5	115.6	116.7	112.3	92.7	69.8	66.5
70°	4710.4	1602.8	182.1	127.6	101.4	89.4	96.0	97.0	78.5	56.7	54.5
72.5°	3453.2	946.4	127.6	94.9	74.1	62.2	78.5	80.7	63.2	42.5	40.3
75°	1968.1	449.2	96.0	68.7	45.8	43.6	61.1	61.1	43.6	28.3	26.2
77.5°	826.5	187.5	67.6	44.7	26.2	25.1	41.4	38.2	21.8	13.1	13.1
80°	238.8	84.0	36.0	21.8	10.9	9.8	16.4	12.0	5.5	2.2	2.2
82.5°	93.8	37.1	14.2	8.7	4.4	4.4	2.2	0.0	0.0	0.0	0.0
85°	55.6	15.3	6.5	3.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	14.2	3.3	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)