

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: P963518

Luminaire Tested: **NAV-SB3A-735-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963518
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-735-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13669.4 lumens
Efficiency: N/A
Efficacy: 161.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

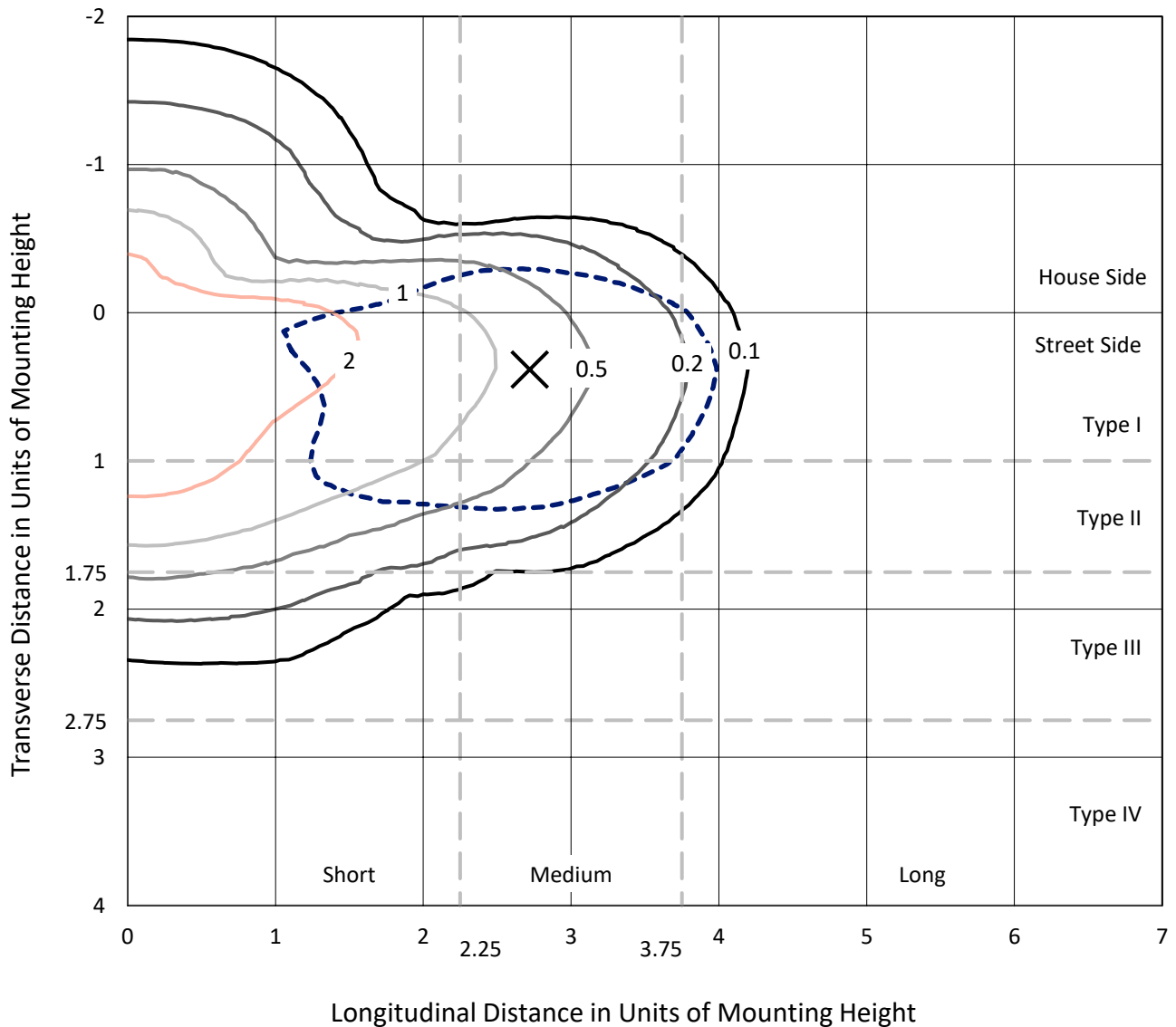
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

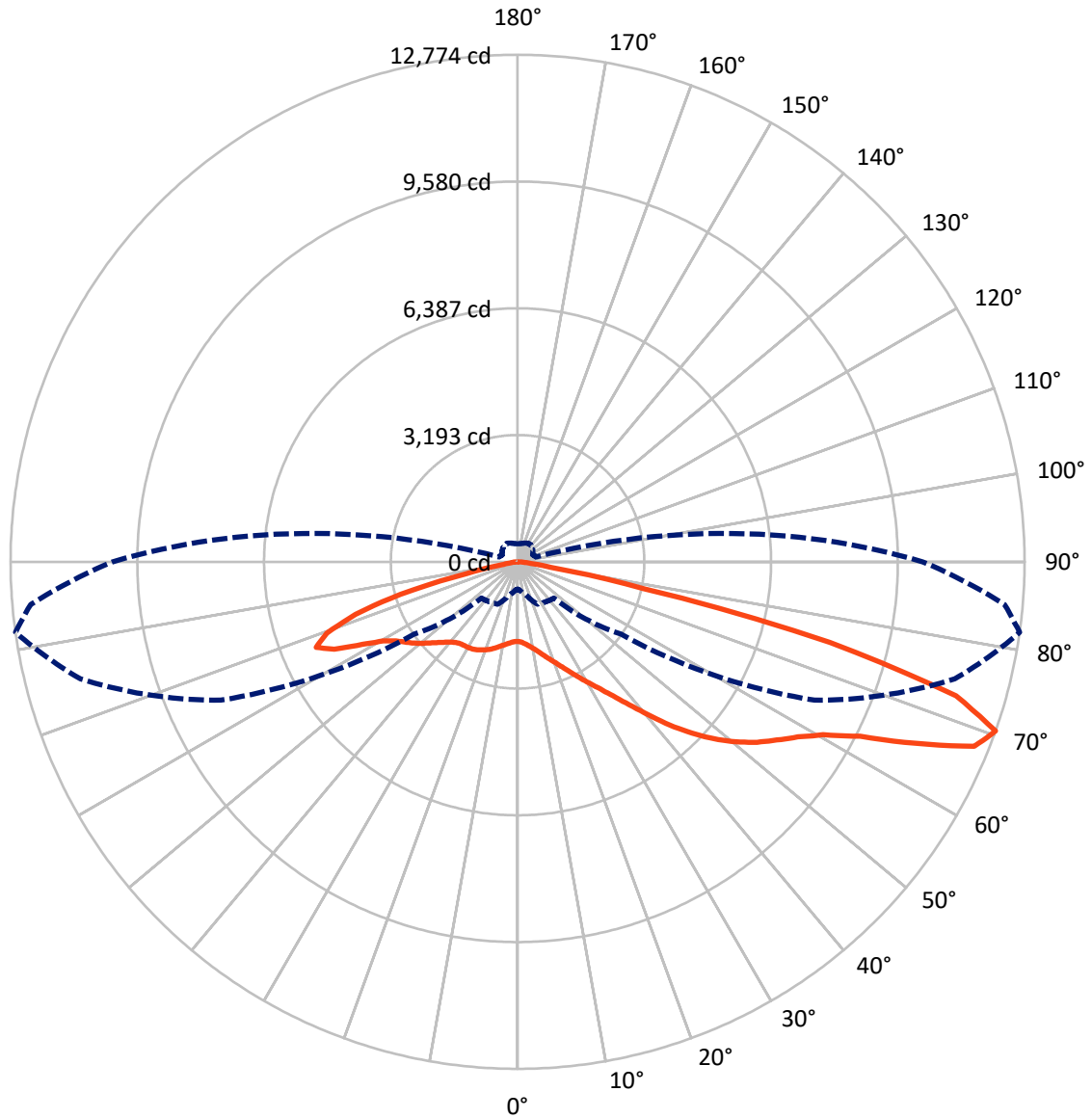
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type II - Medium - N/A

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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	3369.8	0.0	3369.8
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	10299.6	0.0	10299.6
	% Fixture	75.3	0.0	75.3
Total	Lumens	13669.4	0.0	13669.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.2	1.4
10°-20°	543.6	4.0
20°-30°	909.5	6.7
30°-40°	1420.8	10.4
40°-50°	2262.8	16.6
50°-60°	3149.0	23.0
60°-70°	3294.0	24.1
70°-80°	1721.6	12.6
80°-90°	178.8	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°	13669.4	100.0
0°-180°	13669.4	100.0

Coefficient of Utilization

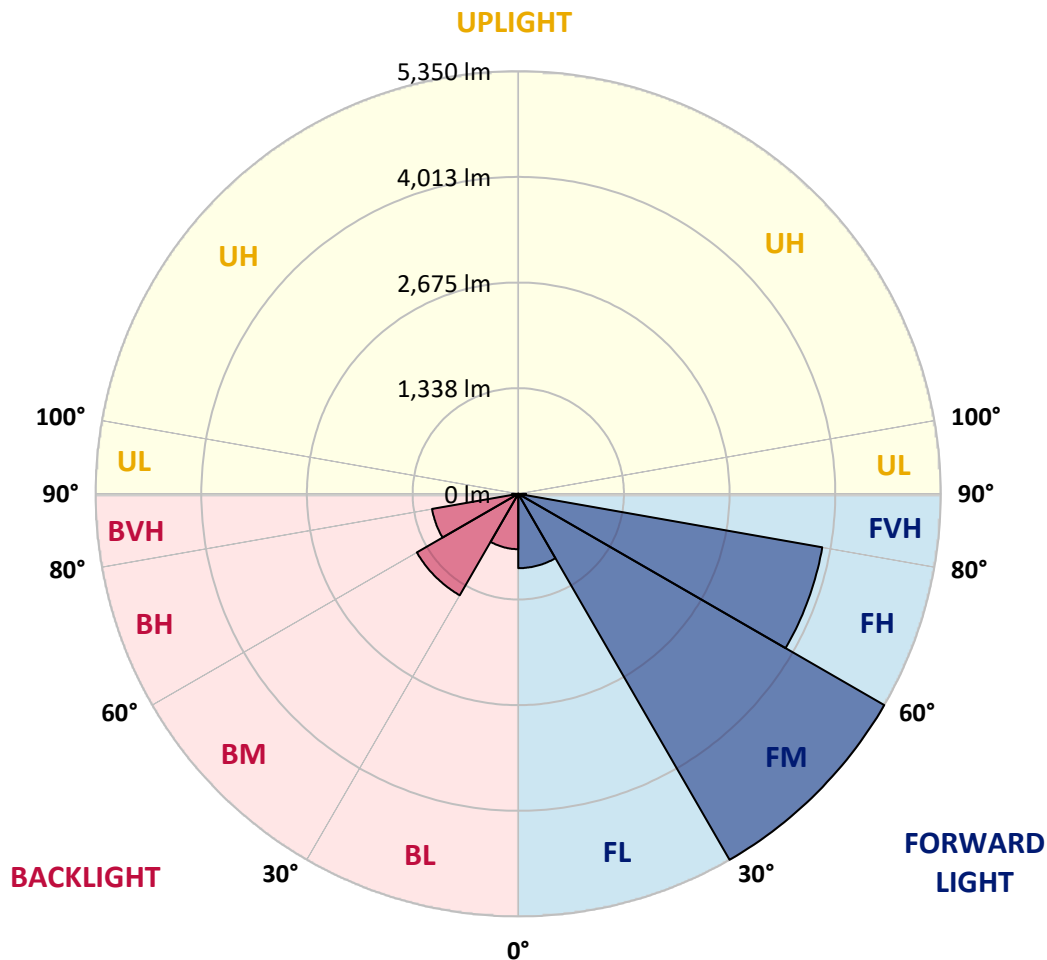


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	941.3	6.9			
FM (30°-60°)	5350.1	39.1			
FH (60°-80°)	3908.1	28.6			G2/5000
FVH (80°-90°)	100.1	0.7			G2/225
BL (0°-30°)	701.0	5.1	B2/1000		
BM (30°-60°)	1482.6	10.8	B2/2500		
BH (60°-80°)	1107.5	8.1	B3/2500		G3/2500
BVH (80°-90°)	78.7	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: P963518
 CATALOG NUMBER: NAV-SB3A-735-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2004.1	2004.1	2004.1	2004.1	2004.1	2004.1	2004.1	2004.1	2004.1	2004.1	2004.1
2.5°	2051.9	2063.6	2059.9	2056.4	2056.4	2051.2	2050.5	2043.2	2037.5	2028.1	2025.9
5°	2078.1	2090.4	2089.0	2091.8	2101.2	2103.5	2105.7	2101.2	2089.7	2078.1	2073.1
7.5°	2054.9	2068.7	2073.1	2090.4	2119.4	2145.5	2165.1	2173.1	2162.2	2145.5	2137.5
10°	1976.5	1991.8	2007.1	2048.4	2099.8	2161.5	2213.7	2245.0	2242.7	2226.8	2213.0
12.5°	1817.7	1833.6	1866.3	1946.8	2041.1	2149.9	2247.1	2312.4	2334.8	2323.3	2299.3
15°	1690.7	1704.6	1729.2	1811.9	1934.5	2099.8	2259.4	2386.4	2443.7	2437.1	2408.1
17.5°	1687.2	1692.9	1708.2	1747.3	1841.6	2021.5	2246.4	2458.9	2568.4	2567.7	2531.4
20°	1751.0	1753.2	1761.9	1769.9	1823.5	1962.1	2213.0	2519.1	2708.4	2708.4	2669.2
22.5°	1839.5	1838.0	1846.7	1839.5	1865.6	1956.9	2192.0	2572.0	2864.4	2875.9	2826.6
25°	1972.2	1964.9	1962.8	1946.1	1951.2	2004.1	2215.1	2632.2	3049.3	3073.3	3011.6
27.5°	2149.2	2137.5	2129.5	2091.1	2078.1	2101.2	2286.3	2704.8	3255.3	3296.6	3218.3
30°	2379.8	2358.8	2347.1	2280.4	2233.3	2237.0	2393.6	2801.2	3470.8	3537.5	3438.1
32.5°	2694.6	2662.0	2630.8	2521.3	2435.0	2406.7	2532.2	2934.7	3704.2	3811.0	3683.2
35°	3047.1	3021.0	2987.7	2818.6	2685.9	2620.6	2719.3	3121.1	3977.7	4146.7	3980.7
37.5°	3386.6	3364.2	3380.0	3152.3	2981.1	2886.1	2964.4	3371.3	4315.0	4564.5	4353.5
40°	3737.7	3720.2	3722.4	3504.8	3305.3	3198.7	3261.9	3685.4	4701.7	5061.3	4801.7
42.5°	4119.2	4106.2	4062.6	3869.7	3645.5	3546.2	3604.2	4048.1	5116.5	5627.1	5293.5
45°	4546.4	4538.4	4497.8	4276.6	4019.8	3908.1	3986.4	4448.5	5533.6	6159.5	5787.5
47.5°	4915.6	4922.2	4917.0	4730.7	4464.5	4300.5	4394.1	4866.3	5921.6	6660.0	6261.1
50°	5093.3	5127.4	5177.5	5119.5	4954.0	4787.3	4805.4	5269.5	6291.6	7129.3	6715.2
52.5°	5000.5	5065.0	5201.4	5294.2	5358.1	5323.2	5274.6	5670.0	6639.7	7552.9	7144.6
55°	4654.5	4745.1	4971.5	5195.6	5521.3	5774.4	5838.2	6113.8	6979.2	7925.7	7550.8
57.5°	4024.2	4171.4	4374.5	4827.9	5376.2	5992.8	6495.4	6729.6	7339.0	8323.9	7975.8
60°	2943.4	3140.7	3393.2	4067.7	4868.4	5875.9	7054.7	7675.5	7850.3	8839.7	8529.2
62.5°	1883.7	2005.5	2237.7	2873.1	3793.5	5277.5	7225.8	8857.8	8717.1	9685.4	9359.0
65°	1289.7	1368.0	1580.6	1937.4	2452.3	3928.4	6767.4	9744.2	10093.8	11025.8	10777.8
67.5°	937.2	996.6	1177.9	1490.6	1597.9	2324.7	5251.5	9703.6	11432.0	12406.9	12021.0
70°	683.3	725.3	877.7	1177.9	1229.5	1293.2	3181.3	8248.5	11403.0	12773.9	12311.9
72.5°	506.2	535.3	637.6	913.9	995.2	873.3	1574.7	5994.9	9798.6	11553.9	11183.3
75°	366.3	388.1	463.5	699.3	796.4	665.1	785.6	3503.3	6834.8	8127.4	8192.7
77.5°	280.0	296.6	345.9	512.1	637.6	499.1	487.4	1611.7	3240.8	3256.7	3439.6
80°	224.9	235.7	262.6	360.5	488.9	373.5	317.6	650.7	1024.2	866.7	909.6
82.5°	165.3	183.5	221.9	253.2	349.6	257.5	193.6	328.6	389.5	335.1	338.0
85°	94.3	106.6	134.2	181.3	223.4	157.4	111.0	145.8	181.3	148.7	132.7
87.5°	33.4	43.6	47.2	71.0	97.2	65.3	42.8	42.0	59.4	44.3	37.0
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: P963518
 CATALOG NUMBER: NAV-SB3A-735-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2004.1	2004.1	2004.1	2004.1	2004.1	2004.1	2004.1	2004.1	2004.1	2004.1	2004.1
2.5°	2018.6	2014.9	2000.5	1980.9	1960.6	1941.0	1934.5	1920.6	1911.2	1906.2	1912.0
5°	2059.2	2047.6	2013.5	1970.0	1924.3	1875.0	1840.2	1808.3	1785.0	1763.3	1772.0
7.5°	2117.2	2096.9	2038.2	1962.1	1880.8	1798.9	1737.9	1691.5	1660.3	1640.0	1644.3
10°	2184.7	2153.5	2063.6	1949.8	1824.2	1706.7	1634.9	1595.0	1575.4	1564.6	1567.4
12.5°	2262.3	2218.1	2089.7	1921.5	1737.9	1603.7	1554.4	1542.8	1543.5	1544.3	1545.7
15°	2358.1	2296.4	2110.7	1859.8	1625.4	1524.7	1516.0	1534.8	1554.4	1563.8	1563.1
17.5°	2466.1	2379.1	2114.4	1758.2	1515.3	1473.8	1501.4	1542.1	1571.8	1584.9	1587.7
20°	2582.2	2463.3	2088.2	1614.6	1424.5	1432.5	1481.8	1534.1	1566.7	1583.4	1587.7
22.5°	2714.9	2553.2	2025.9	1463.7	1350.5	1387.5	1445.6	1496.4	1530.4	1547.1	1551.5
25°	2866.5	2654.0	1927.9	1336.8	1286.8	1336.8	1394.8	1436.8	1464.4	1479.7	1484.0
27.5°	3034.8	2759.2	1797.3	1235.9	1230.9	1284.5	1332.4	1365.1	1379.5	1391.2	1395.5
30°	3203.8	2854.9	1639.3	1159.8	1182.3	1233.1	1267.2	1281.7	1286.1	1288.2	1293.2
32.5°	3386.6	2937.6	1473.1	1096.8	1135.9	1183.1	1203.4	1209.9	1189.5	1175.8	1180.1
35°	3607.8	3026.1	1310.7	1046.6	1090.2	1130.8	1137.3	1131.5	1107.6	1079.3	1080.8
37.5°	3881.3	3136.4	1180.8	1011.2	1047.3	1074.2	1066.2	1064.8	1066.9	1033.6	1035.8
40°	4216.3	3280.0	1085.8	983.6	1012.6	1018.3	995.9	1008.2	1019.1	968.3	969.8
42.5°	4588.5	3453.3	1025.6	964.7	983.6	969.8	935.0	948.7	947.3	880.6	879.9
45°	4967.9	3641.9	1004.6	950.9	956.7	929.2	890.7	894.3	863.9	803.7	805.9
47.5°	5345.0	3844.3	1017.6	939.3	923.3	892.2	862.4	846.4	801.4	756.6	756.6
50°	5714.9	4056.8	1065.5	916.1	877.7	859.6	837.7	809.4	761.6	723.1	720.3
52.5°	6058.1	4270.8	1119.2	877.7	820.3	831.3	817.4	784.8	737.7	698.5	699.3
55°	6383.0	4484.8	1140.2	824.7	766.7	806.6	798.6	738.4	681.8	650.0	647.0
57.5°	6736.9	4742.3	1117.0	757.3	723.1	778.3	747.8	681.1	648.4	624.5	622.4
60°	7227.3	5146.2	1066.9	673.8	681.8	736.3	684.0	656.4	620.8	594.1	592.6
62.5°	8041.8	5899.9	986.5	591.1	633.2	673.8	653.5	626.0	589.7	563.5	563.5
65°	9245.9	6947.2	834.9	526.6	578.8	612.9	620.8	593.4	555.7	528.1	529.5
67.5°	10261.4	7604.5	631.8	472.9	523.0	563.5	586.1	559.2	519.4	492.5	493.2
70°	10205.5	7127.1	482.4	419.9	473.7	515.0	544.0	523.0	480.2	454.8	456.9
72.5°	9064.5	5962.2	390.2	366.3	423.6	464.2	499.1	483.1	439.5	414.9	414.9
75°	6659.3	4232.3	311.9	311.9	361.2	411.2	449.7	439.5	399.6	382.2	377.2
77.5°	2807.1	1775.6	244.5	258.9	300.3	353.2	401.1	404.8	369.9	391.7	355.4
80°	746.4	489.6	186.4	203.8	235.7	291.6	348.9	347.5	309.8	289.5	269.1
82.5°	284.3	192.9	132.7	143.6	170.5	223.4	276.3	285.1	247.3	214.0	214.0
85°	109.6	82.7	82.0	86.3	99.3	148.0	208.9	216.2	186.4	158.2	163.2
87.5°	28.3	24.7	30.4	29.0	45.7	79.0	119.7	124.0	113.9	66.0	94.3
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)