

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: P968196

Luminaire Tested: **NAV-SB5B-727-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968196
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-727-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27544.8 lumens
Efficiency: N/A
Efficacy: 150.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

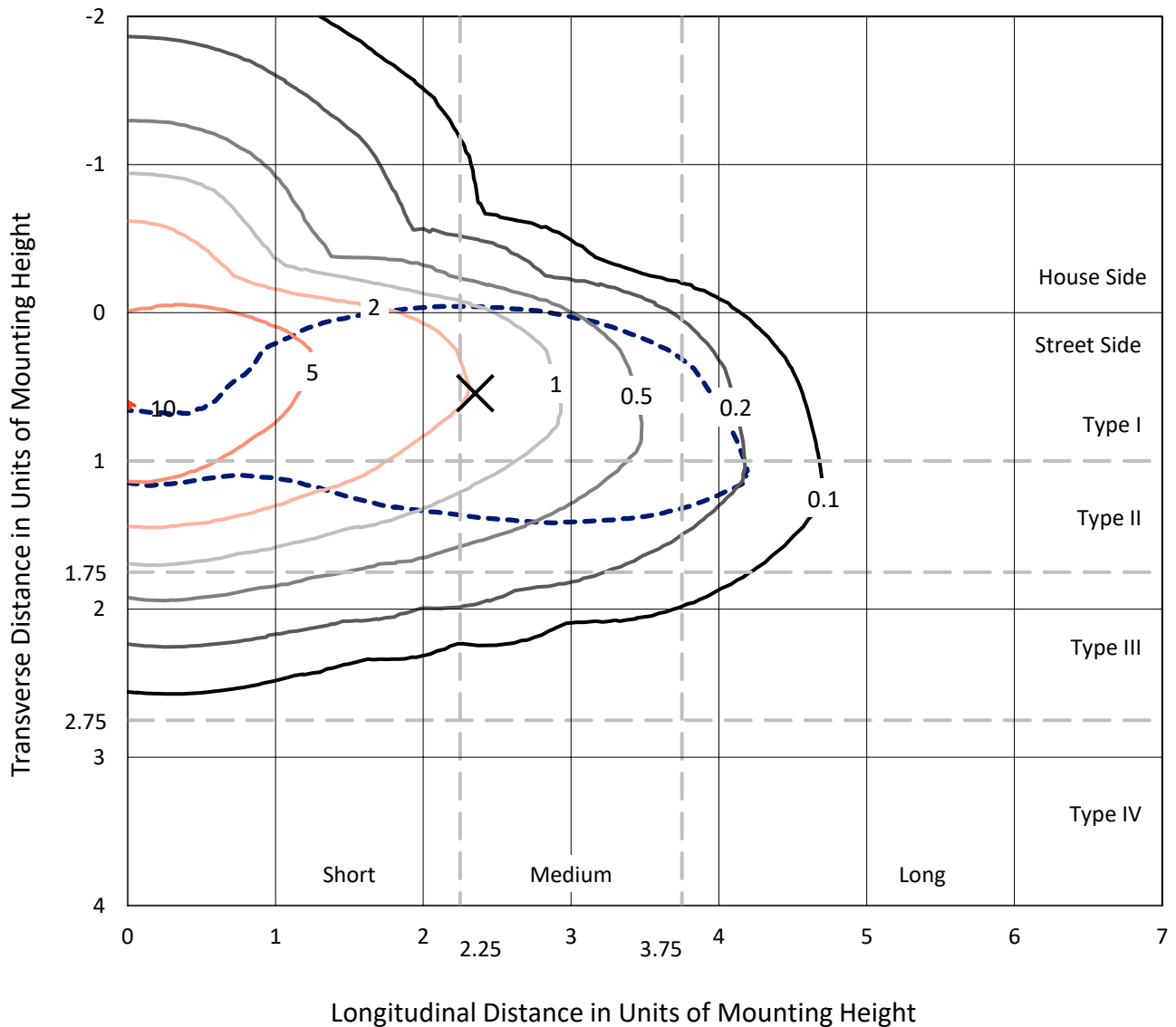
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P968196
 CATALOG NUMBER: NAV-SB5B-727-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

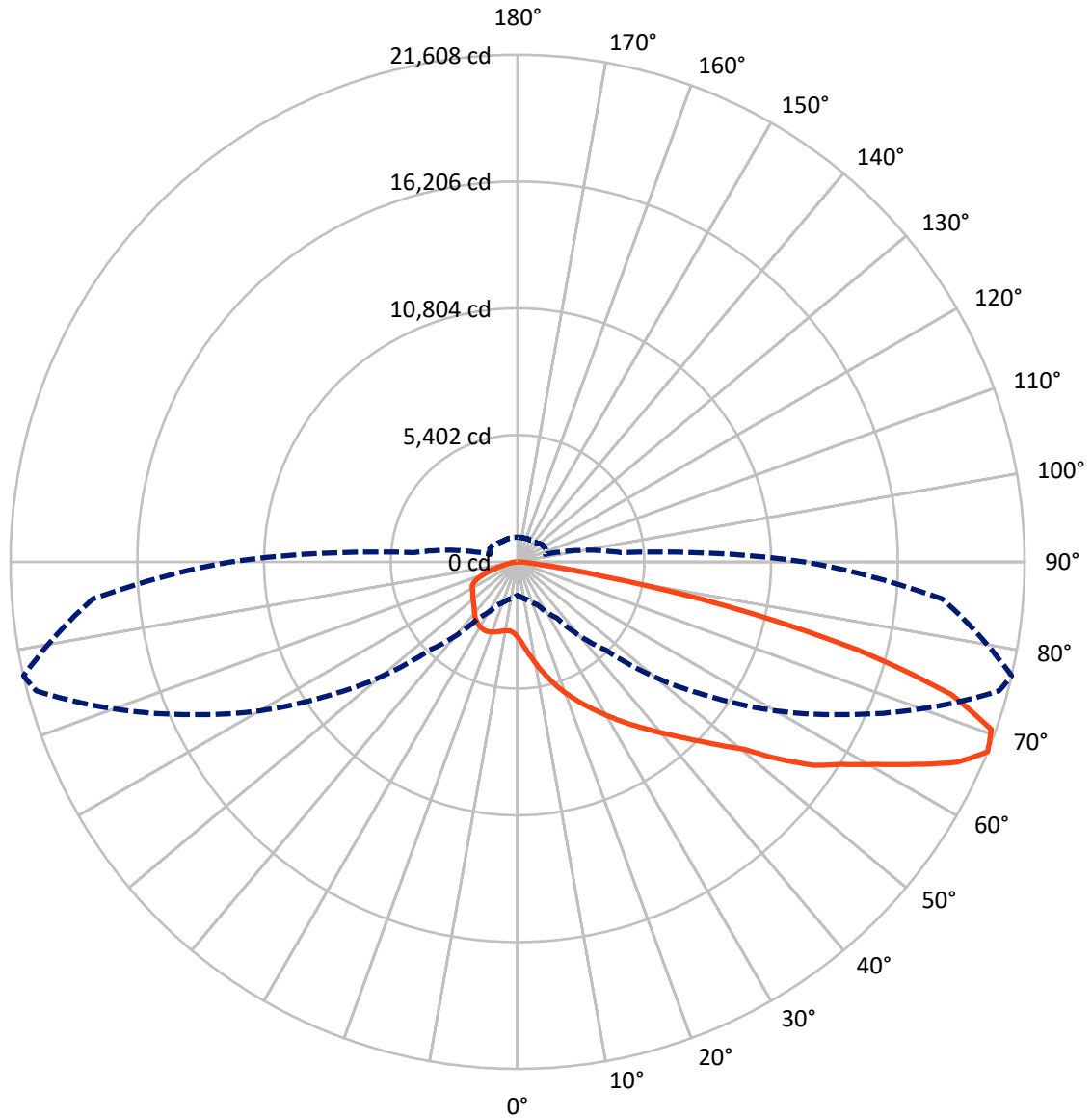
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.1 fc
 Type II - Medium - N/A

REPORT NUMBER: P968196
CATALOG NUMBER: NAV-SB5B-727-U-T2R

Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P968196
 CATALOG NUMBER: NAV-SB5B-727-U-T2R

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5210.4	0.0	5210.4
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	22334.4	0.0	22334.4
	% Fixture	81.1	0.0	81.1
Total	Lumens	27544.8	0.0	27544.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	346.4	1.3
10°-20°	1244.5	4.5
20°-30°	2349.8	8.5
30°-40°	3785.4	13.7
40°-50°	5177.8	18.8
50°-60°	5840.6	21.2
60°-70°	5451.5	19.8
70°-80°	2988.3	10.8
80°-90°	360.5	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°	27544.8	100.0
0°-180°	27544.8	100.0

Coefficient of Utilization

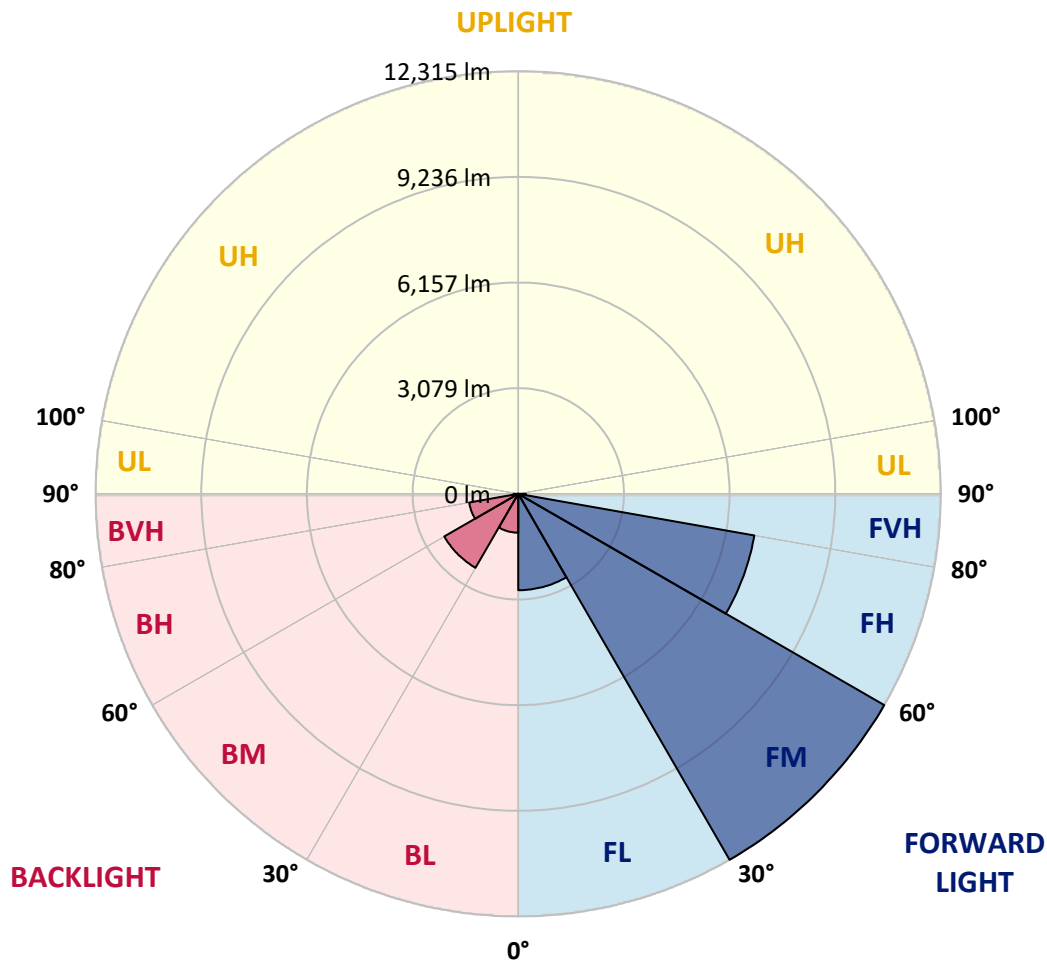


REPORT NUMBER: P968196
 CATALOG NUMBER: NAV-SB5B-727-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2807.8	10.2			
FM (30°-60°)	12315.0	44.7			
FH (60°-80°)	6986.2	25.4			G3/7500
FVH (80°-90°)	225.4	0.8			G3/500
BL (0°-30°)	1132.9	4.1	B3/2500		
BM (30°-60°)	2488.9	9.0	B2/2500		
BH (60°-80°)	1453.6	5.3	B3/2500		G3/2500
BVH (80°-90°)	135.0	0.5			G2/225
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: P968196
 CATALOG NUMBER: NAV-SB5B-727-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3231.8	3231.8	3231.8	3231.8	3231.8	3231.8	3231.8	3231.8	3231.8	3231.8	3231.8
2.5°	4046.6	4075.0	4039.5	4039.5	3920.0	3857.5	3738.1	3647.1	3483.6	3455.1	3347.0
5°	4783.1	4818.6	4768.9	4747.6	4606.8	4477.4	4276.9	4079.3	3787.8	3758.0	3503.4
7.5°	5353.3	5398.8	5354.7	5331.9	5206.8	5061.8	4827.1	4551.3	4140.4	4082.2	3713.9
10°	5818.2	5825.3	5811.1	5819.6	5721.5	5602.1	5361.8	5040.4	4527.1	4447.6	3968.4
12.5°	6081.2	6113.9	6142.4	6193.6	6176.5	6102.5	5886.5	5502.5	4936.7	4834.3	4245.7
15°	6204.9	6261.8	6325.8	6443.9	6539.1	6557.5	6392.6	5998.8	5353.3	5229.5	4525.8
17.5°	6249.0	6303.0	6404.0	6574.7	6779.4	6917.3	6843.3	6480.8	5765.6	5623.5	4820.1
20°	6472.3	6487.9	6549.0	6711.1	6932.9	7161.9	7217.3	6944.3	6173.7	6013.0	5124.4
22.5°	6950.0	6918.7	6935.8	7009.7	7169.0	7390.8	7517.4	7353.8	6593.1	6408.3	5431.5
25°	7739.2	7648.1	7557.1	7471.8	7552.8	7678.0	7821.6	7763.2	7032.4	6797.9	5741.4
27.5°	8735.9	8625.0	8424.5	8144.3	8046.2	8090.3	8154.3	8142.9	7439.1	7201.6	6061.3
30°	9716.9	9587.5	9348.6	8943.4	8684.6	8568.1	8519.7	8487.0	7881.3	7628.3	6384.1
32.5°	10500.4	10398.0	10163.4	9709.8	9334.5	9135.4	8974.7	8858.2	8343.4	8090.3	6725.3
35°	11185.7	11090.4	10821.7	10326.9	9918.8	9707.0	9496.5	9247.8	8824.0	8568.1	7092.2
37.5°	11811.3	11716.1	11347.8	10833.0	10422.2	10275.7	10088.0	9665.8	9306.0	9064.3	7480.3
40°	12206.6	12185.2	11841.2	11258.2	10831.7	10759.1	10696.6	10150.6	9840.6	9615.9	7907.0
42.5°	12307.5	12354.4	12081.5	11602.3	11195.7	11137.3	11283.8	10699.5	10440.6	10225.9	8390.3
45°	12064.4	12199.4	12020.3	11694.7	11454.4	11423.1	11804.2	11299.4	11104.6	10908.5	8973.3
47.5°	11448.7	11677.6	11603.7	11558.2	11524.1	11659.2	12262.1	11936.4	11856.8	11686.2	9638.7
50°	10206.0	10639.7	10769.1	11056.3	11386.2	11842.5	12678.6	12631.7	12735.5	12563.4	10449.2
52.5°	8057.6	8654.8	9405.5	10124.9	10962.5	11781.5	13136.5	13629.8	14067.8	13973.9	11737.4
55°	6651.4	6920.2	7497.4	8816.8	10140.6	11524.1	13342.6	14436.0	15390.1	15306.2	12714.2
57.5°	5570.8	5811.1	6166.6	7268.5	8897.9	10939.7	13470.7	14928.0	16295.9	16287.2	13678.2
60°	4412.0	4666.5	5030.5	5811.1	7446.2	9930.2	13442.2	15488.2	17451.8	17522.9	14854.1
62.5°	3103.9	3384.0	3787.8	4515.8	5963.2	8622.1	12862.0	15893.4	18812.4	19005.9	16268.8
65°	2040.4	2225.2	2529.5	3157.9	4443.3	6940.1	11754.4	15946.0	20268.5	20595.5	17596.8
67.5°	1430.4	1501.5	1680.6	2021.9	2929.0	5322.0	9990.0	15401.4	21239.5	21607.8	18172.6
70°	1116.1	1151.7	1242.7	1379.2	1839.9	3578.8	7655.2	13985.3	21032.0	21415.9	17571.2
72.5°	964.0	998.1	1032.3	1049.3	1234.2	2209.6	5185.5	11693.3	19077.0	19337.1	15277.7
75°	874.4	882.9	911.4	905.7	941.3	1433.3	2993.0	8519.7	15051.7	14962.1	11278.1
77.5°	735.1	746.5	793.3	786.3	836.1	979.7	1554.1	5498.3	9758.1	9149.6	6277.5
80°	622.8	628.4	679.7	671.1	726.5	709.5	793.3	2802.5	4139.1	3506.3	1810.0
82.5°	216.1	267.3	519.0	534.6	554.5	429.4	457.9	1143.2	1264.0	968.3	379.7
85°	105.3	112.3	264.4	375.4	373.9	216.1	223.2	408.1	398.1	312.8	126.6
87.5°	17.0	21.3	31.3	146.5	116.5	56.9	76.8	79.6	82.5	71.1	28.4
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: P968196
 CATALOG NUMBER: NAV-SB5B-727-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3231.8	3231.8	3231.8	3231.8	3231.8	3231.8	3231.8	3231.8	3231.8	3231.8	3231.8
2.5°	3267.4	3196.4	3047.0	2909.2	2801.0	2697.3	2639.0	2589.1	2560.8	2555.0	2555.0
5°	3355.5	3209.1	2937.5	2708.7	2559.3	2448.4	2390.1	2353.2	2334.6	2323.3	2321.8
7.5°	3482.1	3267.4	2880.7	2620.5	2464.1	2384.5	2354.6	2348.9	2347.5	2348.9	2353.2
10°	3657.0	3362.7	2875.0	2599.1	2468.3	2424.2	2422.8	2424.2	2430.0	2431.4	2432.7
12.5°	3846.1	3460.8	2897.8	2617.6	2522.3	2498.2	2493.9	2492.5	2496.8	2499.6	2501.0
15°	4052.2	3590.2	2936.1	2657.4	2582.1	2556.5	2552.2	2543.6	2542.3	2540.9	2539.4
17.5°	4264.1	3718.1	2978.8	2700.1	2620.5	2584.9	2569.3	2549.4	2533.7	2529.5	2533.7
20°	4478.8	3844.7	3008.7	2721.4	2623.3	2573.6	2542.3	2508.2	2481.1	2465.5	2471.2
22.5°	4707.7	3976.9	3027.1	2715.7	2597.8	2529.5	2472.6	2432.7	2391.5	2364.6	2366.0
25°	4931.0	4092.1	3025.7	2685.9	2547.9	2461.2	2388.7	2337.5	2280.6	2252.2	2252.2
27.5°	5145.7	4195.8	2990.1	2633.2	2476.9	2380.2	2293.4	2232.3	2176.9	2149.8	2148.4
30°	5367.5	4282.7	2934.7	2556.5	2393.0	2286.4	2191.0	2138.5	2088.7	2063.1	2061.7
32.5°	5587.9	4362.2	2856.5	2461.2	2296.3	2193.9	2100.1	2051.7	2021.9	2021.9	2023.2
35°	5821.1	4417.6	2752.7	2350.3	2193.9	2095.8	2021.9	1993.4	1990.5	1973.5	1969.2
37.5°	6067.1	4453.2	2626.2	2236.5	2092.9	2000.5	1977.8	1943.7	1915.2	1878.3	1872.6
40°	6325.8	4488.8	2474.0	2118.6	1986.3	1935.1	1925.2	1879.6	1798.7	1707.6	1694.8
42.5°	6640.1	4513.0	2316.2	2000.5	1874.0	1856.9	1871.1	1792.9	1663.6	1595.3	1596.7
45°	7004.0	4552.7	2171.2	1884.0	1758.8	1758.8	1818.6	1716.2	1609.6	1566.9	1574.0
47.5°	7476.0	4645.2	2036.1	1756.0	1652.2	1680.6	1701.9	1623.7	1564.0	1511.5	1510.0
50°	8158.6	4867.0	1896.8	1626.6	1571.1	1628.0	1598.2	1552.7	1483.0	1440.3	1436.0
52.5°	9006.0	4997.8	1773.0	1510.0	1501.5	1558.3	1515.7	1473.0	1420.4	1363.6	1352.2
55°	9583.2	5022.0	1669.2	1424.6	1454.6	1448.8	1433.3	1394.8	1366.4	1291.1	1292.4
57.5°	10228.8	5070.3	1583.9	1373.5	1424.6	1362.1	1356.5	1323.8	1286.8	1235.6	1218.5
60°	11000.8	5145.7	1510.0	1353.6	1399.1	1305.2	1276.8	1264.0	1227.0	1201.5	1208.6
62.5°	11842.5	5214.0	1434.7	1356.5	1369.2	1249.8	1207.1	1202.8	1180.2	1171.6	1171.6
65°	12417.1	5027.6	1340.8	1353.6	1322.4	1192.9	1138.9	1137.4	1119.0	1116.1	1114.7
67.5°	12216.6	4437.6	1214.2	1313.7	1274.0	1136.0	1076.4	1070.6	1046.5	1047.9	1047.9
70°	11212.7	3595.9	1039.4	1215.6	1214.2	1084.9	1011.0	992.4	959.7	965.4	971.1
72.5°	9330.2	2664.6	804.7	1052.2	1119.0	1037.9	935.6	905.7	864.5	870.1	868.8
75°	6738.1	1811.5	585.8	800.5	974.0	982.5	861.6	810.5	760.7	769.3	772.0
77.5°	3448.0	1026.5	430.8	551.7	765.0	892.9	794.8	726.5	715.1	794.8	783.4
80°	1124.7	514.8	298.6	386.7	501.9	730.8	696.7	618.5	615.6	634.2	544.6
82.5°	335.6	217.5	192.0	254.5	277.3	560.2	601.5	467.8	402.4	423.7	437.9
85°	115.2	105.3	109.5	126.6	132.2	328.4	420.9	310.0	292.9	322.8	318.5
87.5°	27.1	37.0	31.3	28.4	28.4	79.6	163.5	129.4	179.2	119.4	115.2
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)