

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: P970490

Luminaire Tested: **NAV-SB6B-827-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P970490
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-SB6B-827-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 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: 31000.1 lumens
Efficiency: N/A
Efficacy: 140.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 220.4
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

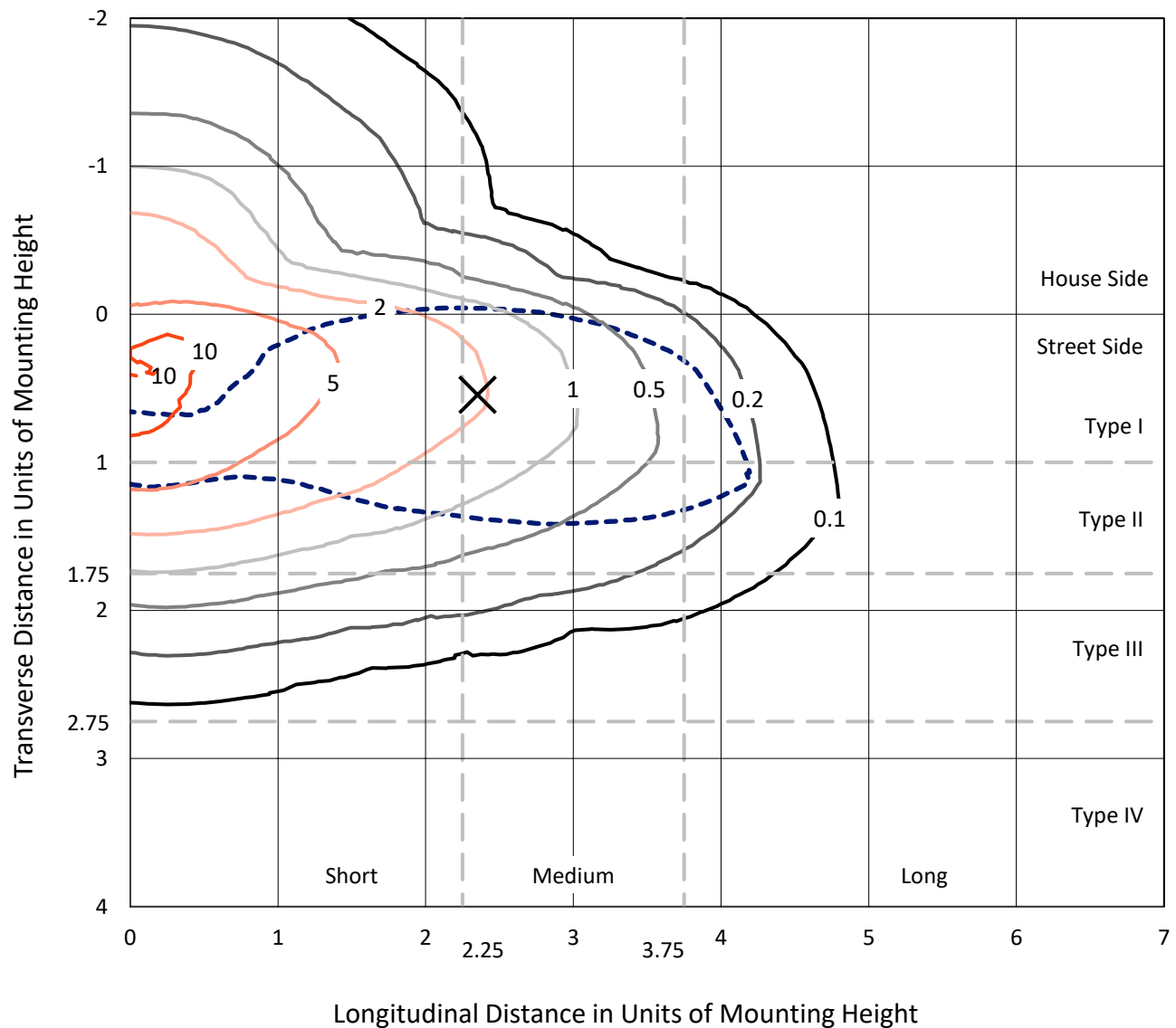


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Iso-Footcandle Lines of Horizontal Illumination

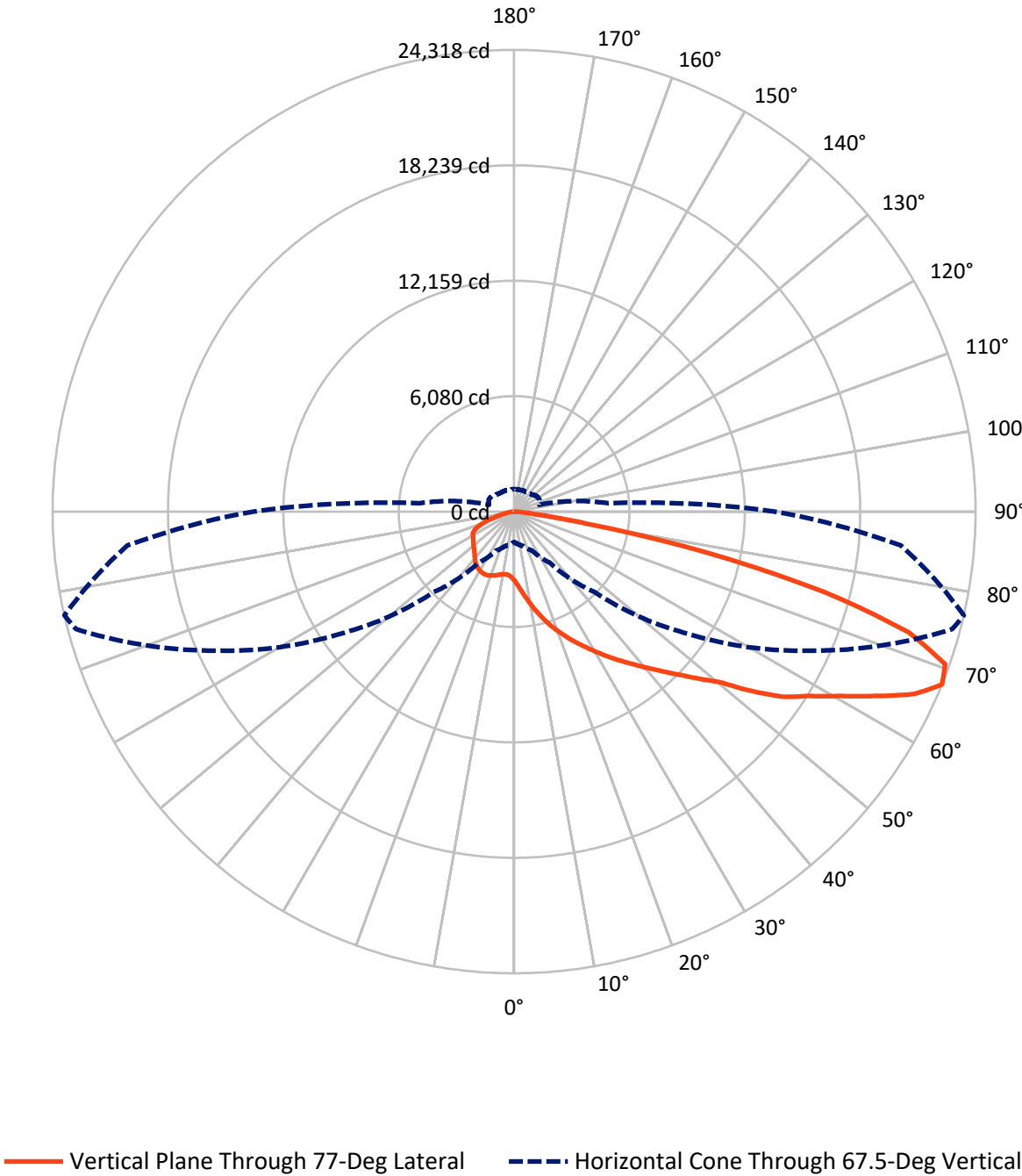
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.4 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5864.0	0.0	5864.0
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	25136.1	0.0	25136.1
	% Fixture	81.1	0.0	81.1
Total	Lumens	31000.1	0.0	31000.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	389.9	1.3
10°-20°	1400.6	4.5
20°-30°	2644.5	8.5
30°-40°	4260.3	13.7
40°-50°	5827.3	18.8
50°-60°	6573.3	21.2
60°-70°	6135.3	19.8
70°-80°	3363.2	10.8
80°-90°	405.7	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°	31000.1	100.0
0°-180°	31000.1	100.0

Coefficient of Utilization



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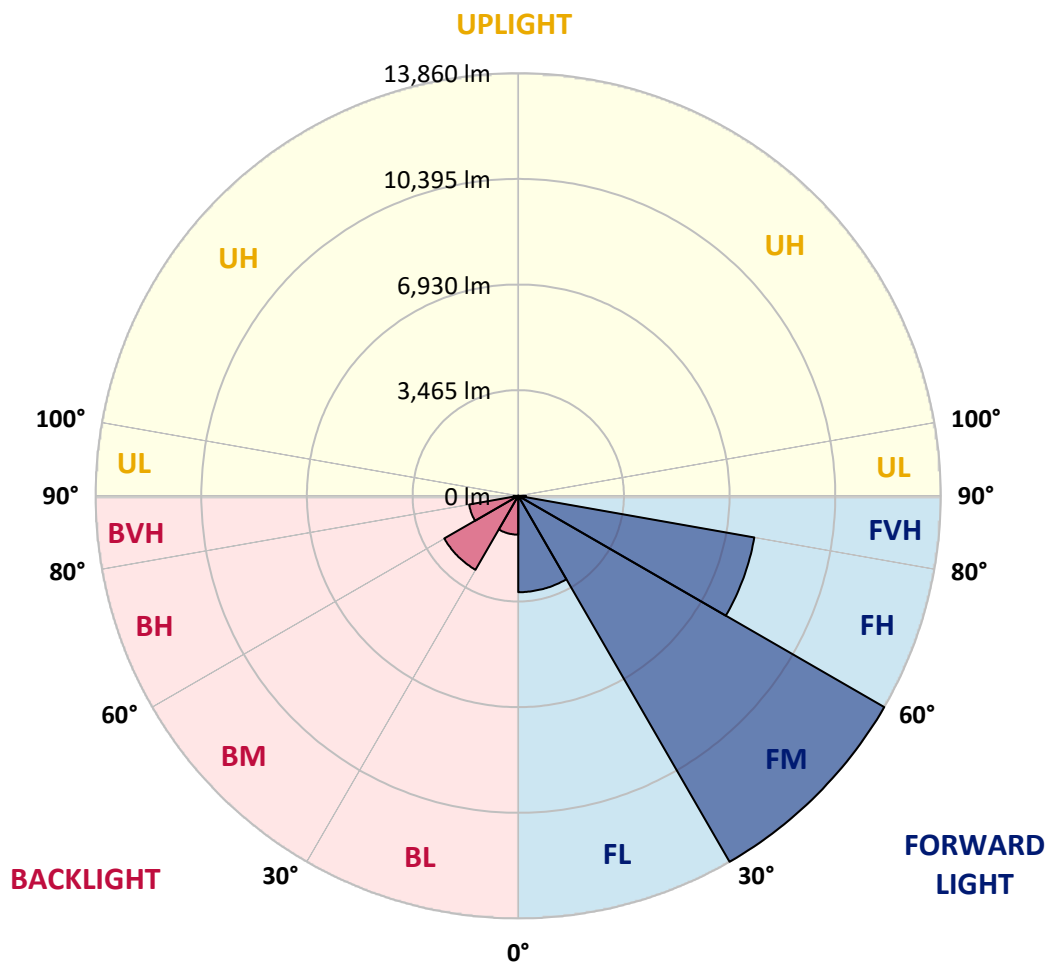
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3160.1	10.2			
FM	(30°-60°)	13859.8	44.7			
FH	(60°-80°)	7862.5	25.4			G4/12000
FVH	(80°-90°)	253.7	0.8			G3/500
BL	(0°-30°)	1275.0	4.1	B3/2500		
BM	(30°-60°)	2801.1	9.0	B3/5000		
BH	(60°-80°)	1636.0	5.3	B3/2500		G3/2500
BVH	(80°-90°)	152.0	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-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3637.3	3637.3	3637.3	3637.3	3637.3	3637.3	3637.3	3637.3	3637.3	3637.3	3637.3
2.5°	4554.2	4586.2	4546.2	4546.2	4411.8	4341.4	4206.9	4104.5	3920.5	3888.5	3766.9
5°	5383.1	5423.1	5367.1	5343.1	5184.7	5039.1	4813.4	4591.0	4263.0	4229.4	3942.9
7.5°	6024.7	6076.0	6026.4	6000.8	5859.9	5696.7	5432.7	5122.2	4659.9	4594.2	4179.7
10°	6548.0	6556.1	6540.0	6549.6	6439.3	6304.8	6034.4	5672.8	5095.1	5005.5	4466.2
12.5°	6844.1	6880.9	6912.9	6970.5	6951.3	6868.1	6624.9	6192.8	5555.9	5440.7	4778.2
15°	6983.3	7047.3	7119.3	7252.2	7359.4	7380.2	7194.6	6751.3	6024.7	5885.5	5093.4
17.5°	7032.9	7093.7	7207.4	7399.4	7629.8	7785.0	7701.8	7293.8	6488.9	6328.9	5424.7
20°	7284.2	7301.8	7370.6	7553.0	7802.6	8060.3	8122.6	7815.4	6948.1	6767.3	5767.2
22.5°	7821.8	7786.6	7805.8	7889.0	8068.3	8317.9	8460.3	8276.3	7420.2	7212.1	6112.8
25°	8709.9	8607.5	8505.1	8409.1	8500.3	8641.2	8802.7	8737.1	7914.6	7650.6	6461.6
27.5°	9831.7	9706.9	9481.2	9166.0	9055.6	9105.2	9177.2	9164.4	8372.3	8105.1	6821.7
30°	10935.8	10790.2	10521.4	10065.3	9774.1	9642.9	9588.5	9551.7	8869.9	8585.1	7184.9
32.5°	11817.5	11702.3	11438.3	10927.8	10505.3	10281.4	10100.6	9969.3	9390.0	9105.2	7569.0
35°	12588.8	12481.6	12179.2	11622.3	11163.1	10924.7	10687.8	10407.7	9930.9	9642.9	7981.9
37.5°	13292.9	13185.7	12771.3	12192.0	11729.5	11564.7	11353.5	10878.2	10473.3	10201.3	8418.7
40°	13737.8	13713.8	13326.5	12670.4	12190.4	12108.7	12038.4	11423.9	11075.0	10822.3	8898.7
42.5°	13851.4	13904.2	13596.9	13057.7	12600.0	12534.4	12699.2	12041.6	11750.3	11508.7	9442.8
45°	13577.8	13729.8	13528.2	13161.7	12891.3	12856.1	13284.9	12716.9	12497.6	12276.8	10098.9
47.5°	12884.9	13142.6	13059.3	13008.1	12969.7	13121.7	13800.2	13433.8	13344.2	13152.1	10847.8
50°	11486.3	11974.4	12120.0	12443.2	12814.4	13328.2	14269.0	14216.2	14333.1	14139.5	11759.9
52.5°	9068.4	9740.5	10585.4	11395.1	12337.6	13259.3	14784.3	15339.6	15832.5	15726.9	13209.7
55°	7485.8	7788.3	8437.9	9922.9	11412.7	12969.7	15016.4	16247.0	17320.7	17226.3	14309.1
57.5°	6269.6	6540.0	6940.1	8180.2	10014.1	12312.0	15160.4	16800.6	18340.0	18330.4	15394.0
60°	4965.4	5251.9	5661.6	6540.0	8380.3	11175.9	15128.4	17431.0	19640.9	19721.0	16717.3
62.5°	3493.3	3808.5	4263.0	5082.3	6711.3	9703.7	14475.5	17887.2	21172.4	21390.0	18309.6
65°	2296.3	2504.3	2846.7	3554.1	5000.7	7810.6	13229.0	17946.3	22811.0	23179.0	19804.2
67.5°	1609.8	1689.8	1891.4	2275.5	3296.4	5989.6	11243.0	17333.5	23903.9	24318.3	20452.2
70°	1256.1	1296.2	1398.6	1552.2	2070.7	4027.7	8615.5	15739.7	23670.3	24102.4	19775.4
72.5°	1085.0	1123.3	1161.7	1181.0	1389.0	2486.8	5835.9	13160.1	21470.0	21762.8	17194.3
75°	984.1	993.7	1025.7	1019.4	1059.3	1613.0	3368.5	9588.5	16939.8	16839.0	12692.9
77.5°	827.3	840.1	892.9	884.9	941.0	1102.6	1749.1	6188.0	10982.3	10297.4	7064.9
80°	700.9	707.2	764.9	755.3	817.7	798.5	892.9	3154.0	4658.2	3946.1	2037.1
82.5°	243.2	300.8	584.0	601.7	624.1	483.3	515.3	1286.6	1422.6	1089.8	427.2
85°	118.4	126.4	297.7	422.5	420.9	243.2	251.2	459.3	448.0	352.1	142.4
87.5°	19.2	24.0	35.2	164.8	131.2	64.0	86.4	89.6	92.8	80.1	32.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3637.3	3637.3	3637.3	3637.3	3637.3	3637.3	3637.3	3637.3	3637.3	3637.3	3637.3
2.5°	3677.3	3597.2	3429.2	3274.1	3152.4	3035.6	2969.9	2914.0	2882.0	2875.5	2875.5
5°	3776.5	3611.7	3306.0	3048.4	2880.4	2755.6	2689.9	2648.4	2627.6	2614.8	2613.1
7.5°	3918.9	3677.3	3242.0	2949.2	2773.1	2683.6	2649.9	2643.6	2641.9	2643.6	2648.4
10°	4115.8	3784.5	3235.6	2925.1	2778.0	2728.3	2726.7	2728.3	2734.8	2736.3	2738.0
12.5°	4328.6	3894.9	3261.2	2946.0	2838.7	2811.6	2806.8	2805.1	2809.9	2813.2	2814.8
15°	4560.6	4040.6	3304.4	2990.7	2906.0	2877.2	2872.4	2862.7	2861.2	2859.5	2858.0
17.5°	4799.0	4184.6	3352.5	3038.8	2949.2	2909.2	2891.6	2869.2	2851.5	2846.7	2851.5
20°	5040.6	4326.9	3386.1	3062.8	2952.4	2896.3	2861.2	2822.7	2792.4	2774.8	2781.1
22.5°	5298.3	4475.8	3406.9	3056.4	2923.6	2846.7	2782.8	2738.0	2691.5	2661.1	2662.7
25°	5549.6	4605.4	3405.3	3022.8	2867.5	2770.0	2688.4	2630.8	2566.7	2534.7	2534.7
27.5°	5791.1	4722.2	3365.3	2963.6	2787.6	2678.7	2581.2	2512.4	2450.0	2419.5	2417.9
30°	6040.8	4819.9	3302.9	2877.2	2693.2	2573.2	2465.9	2406.7	2350.7	2321.9	2320.3
32.5°	6288.8	4909.4	3214.8	2770.0	2584.3	2469.1	2363.5	2309.1	2275.5	2275.5	2277.1
35°	6551.3	4971.9	3098.0	2645.1	2469.1	2358.7	2275.5	2243.5	2240.3	2221.1	2216.3
37.5°	6828.1	5011.8	2955.6	2517.1	2355.6	2251.5	2225.9	2187.5	2155.5	2113.9	2107.5
40°	7119.3	5051.8	2784.4	2384.4	2235.5	2177.9	2166.6	2115.5	2024.3	1921.9	1907.4
42.5°	7473.0	5079.1	2606.8	2251.5	2109.0	2089.9	2105.9	2017.8	1872.3	1795.4	1797.0
45°	7882.7	5123.9	2443.5	2120.3	1979.5	1979.5	2046.6	1931.4	1811.5	1763.4	1771.4
47.5°	8413.9	5227.9	2291.5	1976.3	1859.5	1891.4	1915.4	1827.5	1760.2	1701.0	1699.4
50°	9181.9	5477.5	2134.7	1830.6	1768.2	1832.3	1798.7	1747.4	1669.0	1621.0	1616.2
52.5°	10135.7	5624.7	1995.5	1699.4	1689.8	1753.9	1705.8	1657.8	1598.6	1534.6	1521.8
55°	10785.4	5652.0	1878.6	1603.4	1637.0	1630.6	1613.0	1569.8	1537.8	1453.0	1454.6
57.5°	11511.9	5706.4	1782.7	1545.8	1603.4	1533.0	1526.6	1489.8	1448.2	1390.6	1371.3
60°	12380.8	5791.1	1699.4	1523.4	1574.6	1469.0	1436.9	1422.6	1381.0	1352.2	1360.2
62.5°	13328.2	5867.9	1614.6	1526.6	1541.0	1406.6	1358.5	1353.8	1328.2	1318.6	1318.6
65°	13974.6	5658.3	1509.0	1523.4	1488.2	1342.5	1281.8	1280.1	1259.3	1256.1	1254.6
67.5°	13749.0	4994.2	1366.5	1478.6	1433.8	1278.6	1211.3	1205.0	1177.7	1179.4	1179.4
70°	12619.3	4046.9	1169.7	1368.2	1366.5	1221.0	1137.8	1116.9	1080.1	1086.5	1093.0
72.5°	10500.6	2998.8	905.7	1184.2	1259.3	1168.2	1053.0	1019.4	972.9	979.3	977.7
75°	7583.4	2038.6	659.3	900.9	1096.1	1105.8	969.8	912.1	856.1	865.7	868.9
77.5°	3880.5	1155.4	484.8	620.8	860.9	1004.9	894.5	817.7	804.9	894.5	881.7
80°	1265.8	579.2	336.0	435.2	564.9	822.5	784.1	696.1	692.9	713.7	612.8
82.5°	377.6	244.9	216.1	286.5	312.0	630.5	676.9	526.4	452.8	476.8	492.8
85°	129.7	118.4	123.2	142.4	148.8	369.6	473.7	348.8	329.6	363.3	358.4
87.5°	30.4	41.6	35.2	32.0	32.0	89.6	184.0	145.7	201.6	134.4	129.7
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)