

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: P966698

Luminaire Tested: **NAV-SB4C-740-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966698
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-740-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31810.9 lumens
Efficiency: N/A
Efficacy: 158.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G5

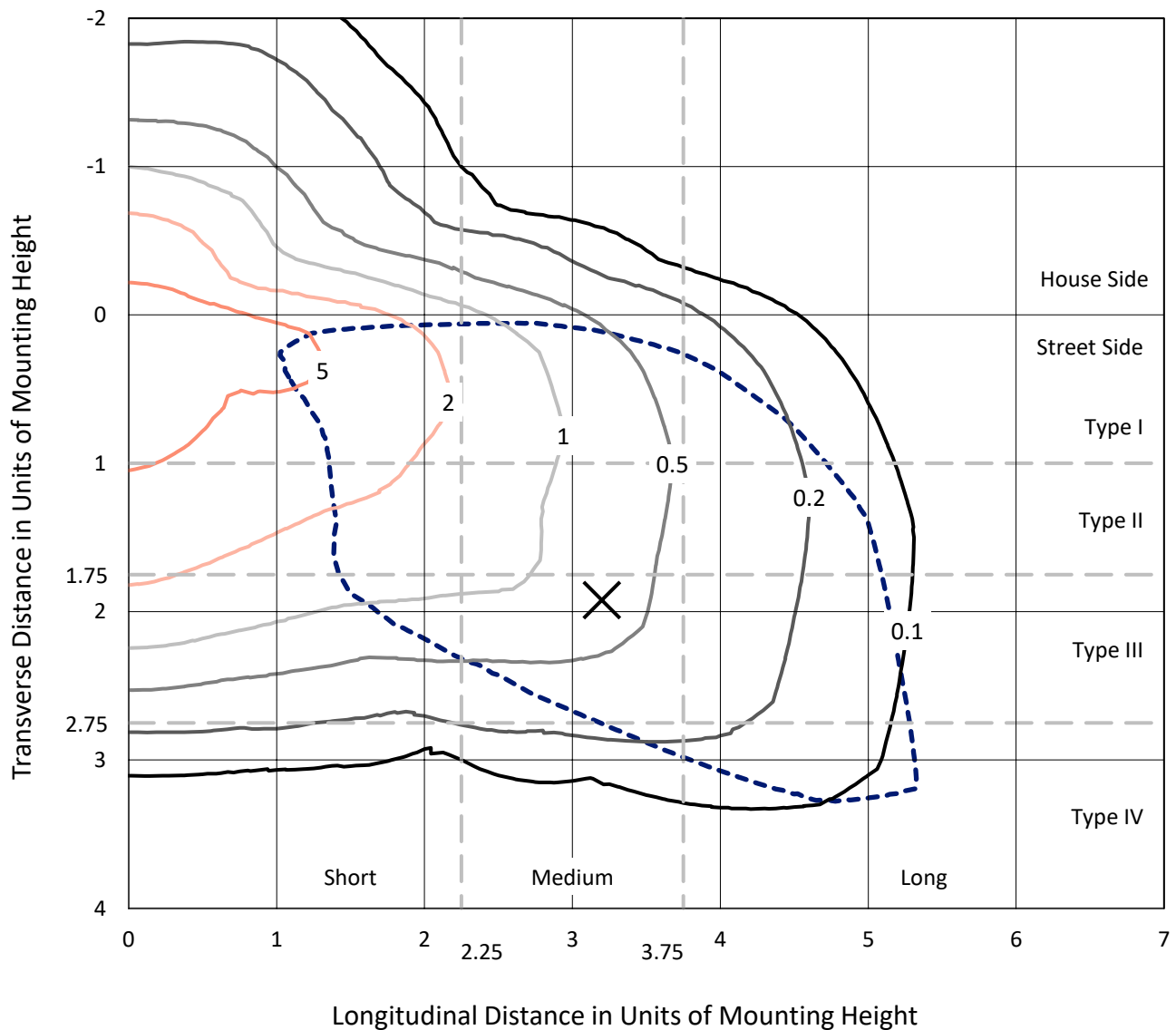
Input Watts (W): 200.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

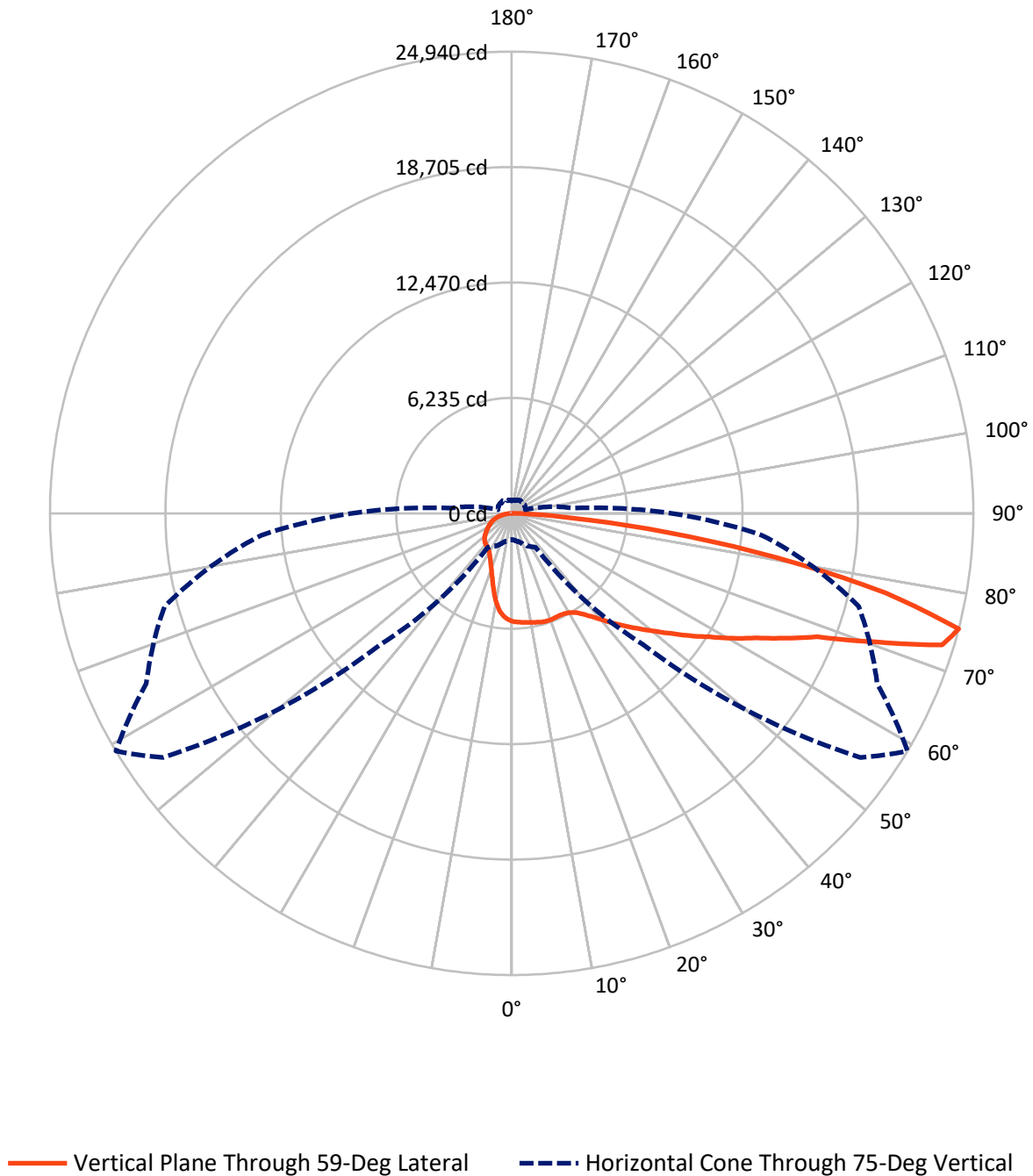
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.3 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5966.3	0.0	5966.3
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	25844.5	0.0	25844.5
	% Fixture	81.2	0.0	81.2
Total	Lumens	31810.9	0.0	31810.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	523.5	1.6
10°-20°	1338.2	4.2
20°-30°	2032.6	6.4
30°-40°	3021.5	9.5
40°-50°	4493.4	14.1
50°-60°	6099.3	19.2
60°-70°	7446.3	23.4
70°-80°	5843.7	18.4
80°-90°	1012.3	3.2
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°	31810.9	100.0
0°-180°	31810.9	100.0

Coefficient of Utilization



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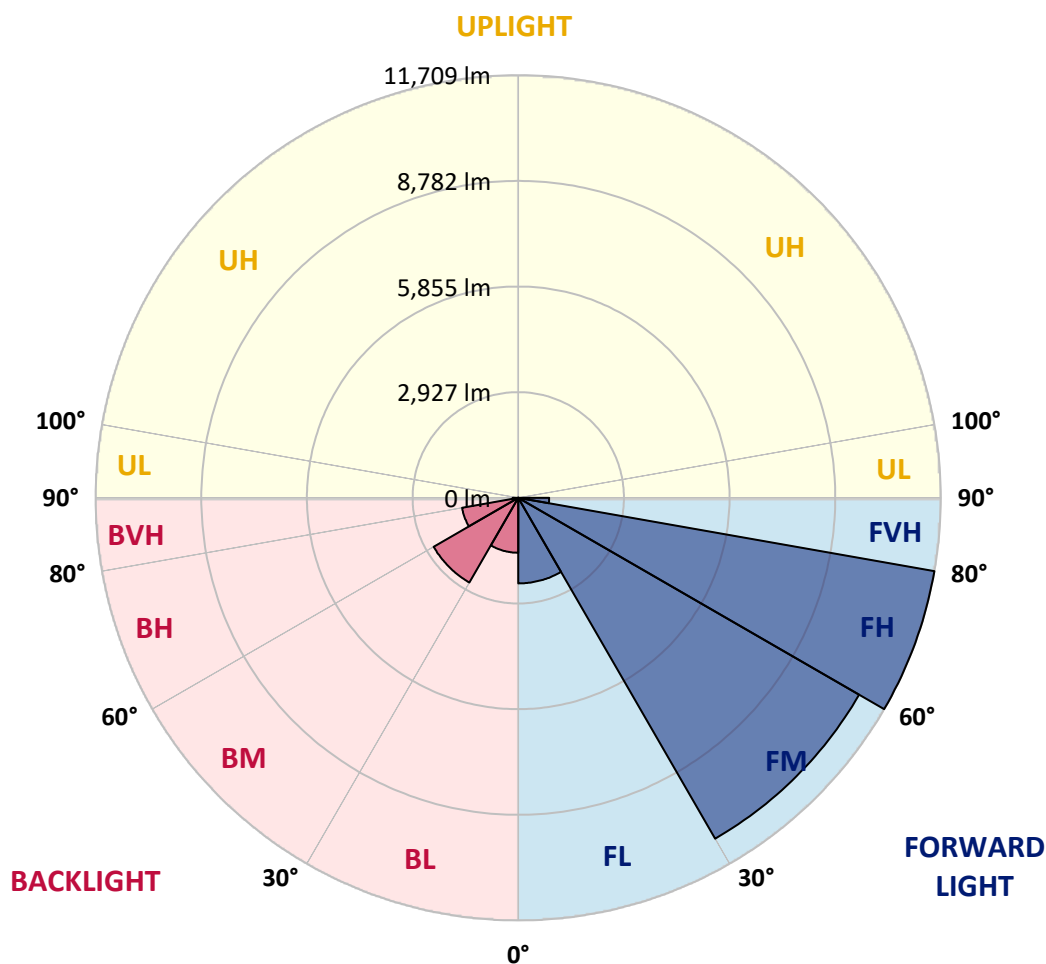
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2371.8	7.5			
FM	(30°-60°)	10906.1	34.3			
FH	(60°-80°)	11709.3	36.8			G4/12000
FVH	(80°-90°)	857.3	2.7			G5
BL	(0°-30°)	1522.5	4.8	B3/2500		
BM	(30°-60°)	2708.1	8.5	B3/5000		
BH	(60°-80°)	1580.7	5.0	B3/2500		G3/2500
BVH	(80°-90°)	155.0	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-G5

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	5838.8	5838.8	5838.8	5838.8	5838.8	5838.8	5838.8	5838.8	5838.8	5838.8	5838.8
2.5°	5888.4	5867.9	5888.4	5879.9	5876.4	5869.7	5871.3	5883.3	5876.4	5885.0	5855.9
5°	5849.1	5837.1	5857.7	5852.5	5874.8	5878.2	5900.4	5914.1	5922.7	5924.4	5902.2
7.5°	5784.1	5772.1	5801.2	5825.1	5873.0	5886.8	5932.9	5955.1	5967.1	5987.7	5955.1
10°	5546.2	5541.0	5612.9	5703.6	5816.6	5886.8	5956.9	5994.5	6013.4	6068.1	6030.5
12.5°	5125.2	5132.1	5226.2	5400.7	5626.6	5852.5	5984.3	6039.0	6068.1	6136.6	6119.5
15°	4723.1	4721.4	4824.1	5010.6	5327.1	5701.9	5998.0	6092.1	6141.7	6242.7	6229.0
17.5°	4490.3	4483.5	4555.4	4697.4	4991.8	5470.9	5963.8	6121.2	6227.3	6353.9	6341.9
20°	4447.6	4433.8	4471.6	4541.7	4750.5	5217.7	5874.8	6121.2	6295.8	6460.0	6453.2
22.5°	4603.3	4581.0	4565.7	4557.0	4649.5	5008.9	5773.8	6100.6	6396.7	6612.3	6600.3
25°	4916.4	4882.2	4803.5	4726.5	4699.1	4914.8	5684.8	6095.5	6547.3	6817.7	6773.2
27.5°	5423.0	5380.2	5221.0	5036.2	4870.3	4962.6	5645.4	6126.3	6713.2	7035.0	6946.0
30°	6051.0	6004.8	5804.6	5520.5	5222.8	5140.6	5695.1	6217.0	6925.5	7324.1	7149.7
32.5°	6614.0	6562.7	6391.6	6102.3	5700.2	5448.7	5852.5	6389.8	7259.2	7726.3	7456.0
35°	7113.7	7053.8	6899.8	6632.9	6285.5	5881.6	6136.6	6696.1	7733.2	8380.0	7871.8
37.5°	7603.1	7532.9	7365.2	7082.9	6839.9	6458.3	6528.4	7089.7	8362.9	9174.1	8422.8
40°	8150.7	8049.7	7846.2	7567.2	7331.0	7134.2	7043.5	7572.3	9002.9	10060.5	9110.7
42.5°	8681.2	8585.4	8342.4	8104.6	7808.4	7752.0	7640.8	8137.1	9702.9	11034.2	9808.9
45°	9252.8	9138.1	8843.8	8542.6	8356.1	8162.7	8219.2	8701.7	10389.1	12026.7	10541.3
47.5°	9788.4	9660.0	9312.6	8977.3	8874.6	8508.4	8749.7	9322.9	11102.7	13033.0	11266.9
50°	10077.6	9951.0	9661.8	9358.9	9278.4	8934.5	9324.6	10005.7	11850.4	14035.7	11963.4
52.5°	10318.9	10181.9	9803.8	9636.1	9612.1	9398.2	10033.1	10786.1	12598.3	14922.2	12635.9
55°	10575.5	10423.3	9940.7	9790.1	9899.7	9918.4	10873.3	11670.8	13388.9	15786.3	13270.8
57.5°	10871.7	10678.2	10072.5	9920.2	10180.3	10527.7	11838.4	12588.0	14165.8	16587.3	13835.6
60°	11150.6	10955.5	10325.7	10127.2	10483.2	11234.4	12945.6	13698.6	15045.4	17300.9	14369.5
62.5°	11205.3	11044.5	10527.7	10525.9	10893.9	12059.2	14256.5	14819.6	15813.7	18005.9	14848.6
65°	10257.3	10156.3	9850.0	10510.6	11482.6	13246.9	15716.2	16253.5	16790.8	18621.9	15269.5
67.5°	7806.8	7820.4	7798.2	9073.1	11006.9	14953.0	17829.6	17788.6	17997.4	19313.3	15753.8
70°	3569.7	3650.1	4173.8	6263.2	8818.1	15149.8	21324.0	20791.8	19511.8	20208.3	16173.1
72.5°	1928.5	1990.2	2204.1	3034.1	5301.5	13469.3	23935.4	24313.6	21525.9	20810.6	15712.7
75°	1415.2	1449.5	1598.3	1928.5	2226.3	10010.9	22999.4	24939.9	21777.5	19405.7	13568.5
77.5°	1059.2	1074.7	1196.2	1528.2	1139.7	5277.5	18377.2	20654.9	18642.5	15943.8	10022.9
80°	768.3	785.5	876.2	1146.6	799.2	1930.3	12618.8	14497.8	12767.7	10163.2	4995.1
82.5°	530.5	537.3	576.7	780.3	557.9	749.6	7159.9	8501.6	7127.4	3566.3	1348.5
85°	320.0	328.5	345.6	455.2	316.6	356.0	3090.6	3196.7	2130.6	852.2	419.2
87.5°	131.8	140.3	154.1	191.7	124.9	99.2	509.9	640.0	398.7	249.9	130.1
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°	5838.8	5838.8	5838.8	5838.8	5838.8	5838.8	5838.8	5838.8	5838.8	5838.8	5838.8
2.5°	5847.4	5835.4	5802.8	5758.3	5717.3	5666.0	5643.8	5624.9	5607.8	5575.3	5559.9
5°	5883.3	5850.8	5763.5	5650.6	5522.2	5381.9	5245.0	5150.9	5070.5	5010.6	4960.9
7.5°	5938.0	5876.4	5717.3	5486.3	5191.9	4890.8	4618.6	4425.3	4279.9	4226.8	4134.4
10°	5994.5	5920.9	5643.8	5236.4	4728.2	4264.4	3903.4	3704.9	3588.5	3550.9	3492.7
12.5°	6061.2	5953.5	5529.1	4889.0	4209.7	3701.5	3386.6	3270.3	3210.3	3189.8	3194.9
15°	6158.8	5980.9	5356.2	4454.4	3715.1	3290.8	3087.1	3006.6	2975.9	2974.1	2981.0
17.5°	6232.4	5986.0	5087.6	3989.0	3335.2	3042.6	2874.9	2844.1	2864.7	2895.4	2907.4
20°	6314.5	5939.8	4735.1	3564.5	3068.3	2825.3	2755.1	2775.7	2825.3	2869.8	2885.2
22.5°	6372.7	5855.9	4309.0	3234.3	2837.3	2700.4	2697.0	2739.7	2767.1	2789.3	2801.3
25°	6424.1	5713.9	3857.2	2957.0	2647.3	2625.0	2662.7	2649.0	2630.3	2649.0	2661.0
27.5°	6461.7	5489.7	3453.3	2714.1	2513.8	2573.8	2551.5	2520.7	2518.9	2529.3	2546.3
30°	6449.7	5190.3	3121.3	2483.1	2419.7	2477.9	2424.8	2419.7	2414.6	2419.7	2438.6
32.5°	6449.7	4849.7	2866.3	2323.9	2359.9	2337.6	2332.5	2320.5	2299.9	2298.3	2320.5
35°	6485.7	4509.2	2647.3	2238.3	2310.2	2257.2	2260.5	2231.5	2188.7	2168.2	2188.7
37.5°	6559.3	4235.4	2430.0	2197.3	2222.9	2221.2	2207.5	2157.9	2082.6	2017.6	2039.9
40°	6737.2	4154.9	2281.1	2178.4	2181.8	2202.4	2166.4	2070.6	1899.5	1793.4	1807.1
42.5°	7016.1	4290.1	2248.6	2132.2	2154.4	2175.0	2104.8	1882.4	1760.8	1697.6	1697.6
45°	7370.4	4526.3	2318.8	2065.5	2089.5	2125.3	1916.6	1810.6	1755.7	1757.5	1766.0
47.5°	7818.7	4774.4	2448.8	2007.3	1995.4	2015.9	1791.7	1726.6	1651.4	1670.2	1718.1
50°	8337.2	5026.0	2572.0	1928.5	1890.9	1824.2	1711.2	1649.6	1553.8	1509.3	1521.3
52.5°	8898.5	5269.0	2621.6	1832.8	1778.0	1701.0	1656.5	1581.2	1464.8	1391.2	1389.6
55°	9430.7	5489.7	2566.9	1718.1	1665.0	1605.1	1598.3	1552.2	1427.2	1324.5	1324.5
57.5°	9933.9	5674.5	2430.0	1601.8	1550.4	1514.4	1560.7	1538.4	1381.0	1249.3	1242.4
60°	10360.0	5801.2	2231.5	1483.7	1447.7	1428.8	1499.1	1492.2	1316.0	1168.8	1163.7
62.5°	10698.7	5850.8	2012.5	1370.7	1362.1	1327.9	1413.5	1413.5	1233.8	1090.1	1085.0
65°	10964.0	5802.8	1790.0	1259.5	1276.6	1225.3	1309.1	1298.9	1146.6	1019.9	1013.1
67.5°	11198.4	5645.4	1543.5	1149.9	1189.3	1124.3	1199.6	1175.7	1050.7	949.8	942.9
70°	11302.9	5279.3	1262.9	1040.5	1088.3	1025.0	1090.1	1045.6	942.9	874.4	860.8
72.5°	10464.3	4387.7	994.2	925.8	966.9	915.5	972.0	920.7	826.6	795.7	770.1
75°	8657.3	3292.5	765.0	800.8	831.7	792.3	829.9	792.3	706.7	729.0	665.6
77.5°	6287.1	2222.9	585.3	669.1	682.8	662.3	694.7	652.0	575.0	569.9	544.2
80°	3126.5	1302.3	458.6	528.8	523.7	509.9	547.6	527.1	462.1	489.4	484.3
82.5°	905.3	557.9	333.7	371.4	361.1	364.5	391.9	402.1	602.4	597.3	610.9
85°	284.0	219.0	200.2	207.0	196.8	201.9	231.0	458.6	424.4	248.2	268.7
87.5°	73.6	75.3	49.6	53.1	54.7	65.0	73.6	278.9	133.5	87.2	92.5
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)