

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: P966822

Luminaire Tested: **NAV-SB4C-830-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966822
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-830-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3000K, 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: 27016.9 lumens
Efficiency: N/A
Efficacy: 134.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

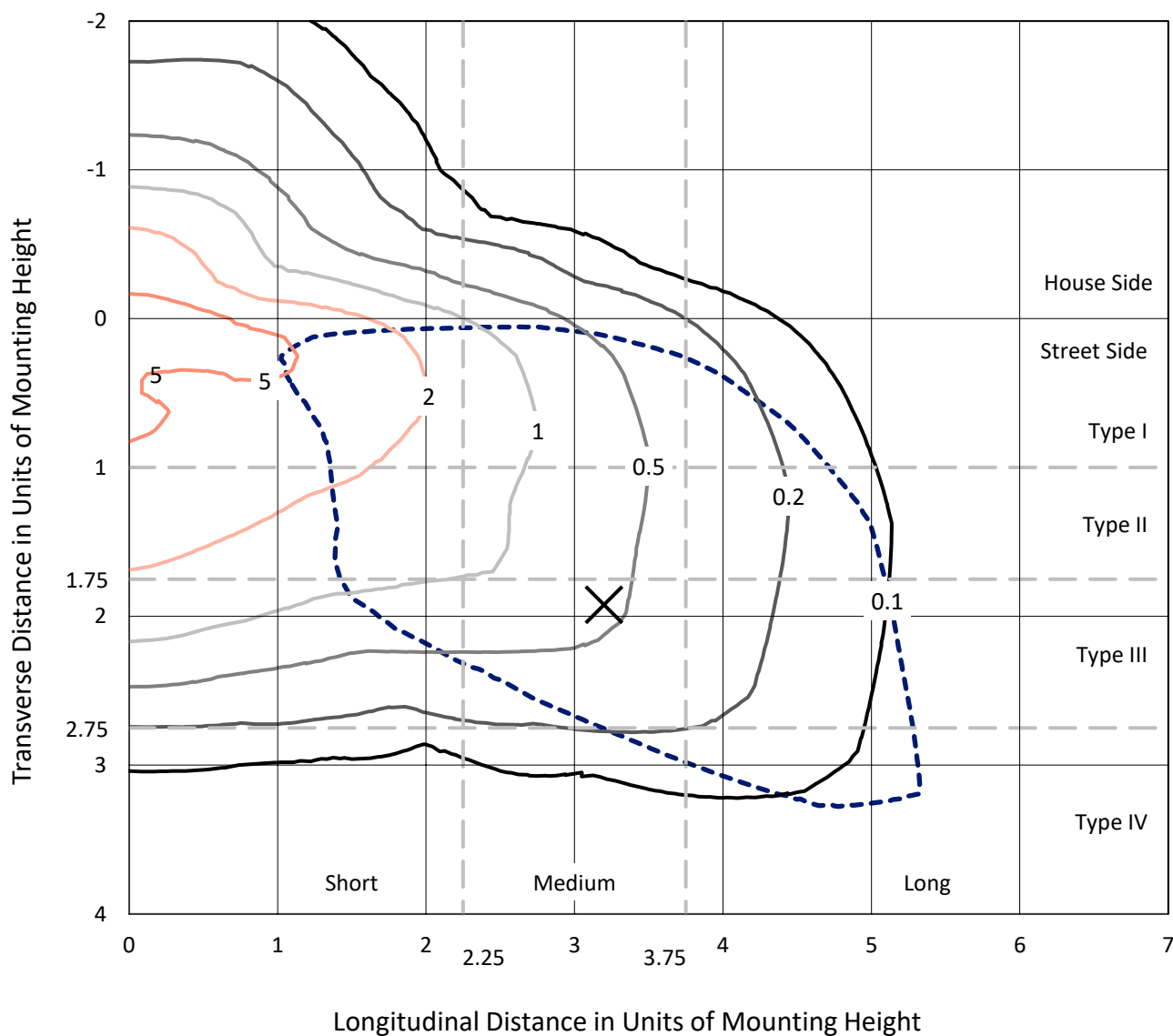
Input Watts (W): 200.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P966822
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Iso-Footcandle Lines of Horizontal Illumination

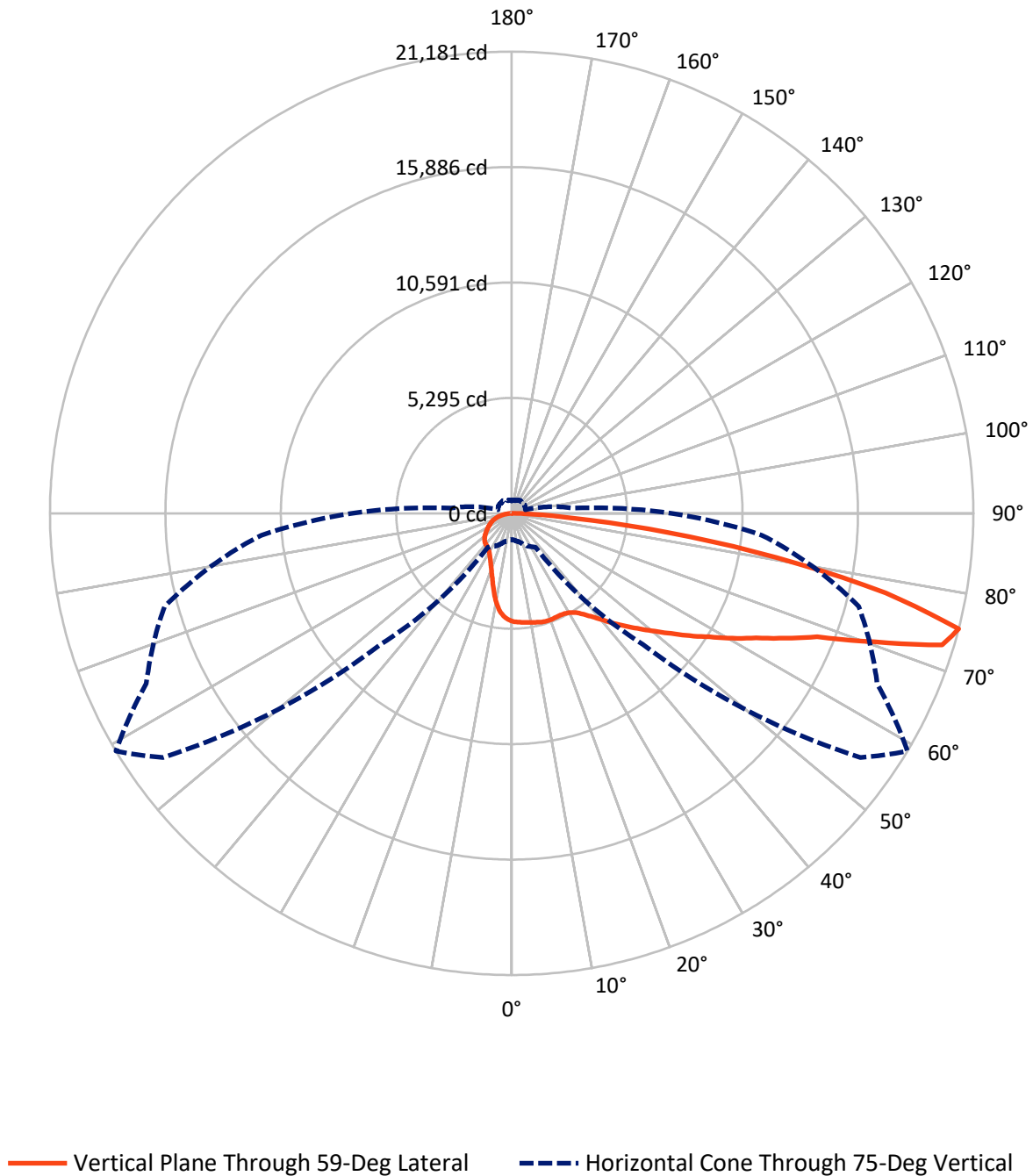
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 fc
 Type IV - Medium - N/A

REPORT NUMBER: P966822
CATALOG NUMBER: NAV-SB4C-830-U-SL3

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5067.2	0.0	5067.2
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	21949.7	0.0	21949.7
	% Fixture	81.2	0.0	81.2
Total	Lumens	27016.9	0.0	27016.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	444.6	1.6
10°-20°	1136.5	4.2
20°-30°	1726.3	6.4
30°-40°	2566.1	9.5
40°-50°	3816.3	14.1
50°-60°	5180.1	19.2
60°-70°	6324.1	23.4
70°-80°	4963.1	18.4
80°-90°	859.7	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°	27016.9	100.0
0°-180°	27016.9	100.0

Coefficient of Utilization



REPORT NUMBER: P966822

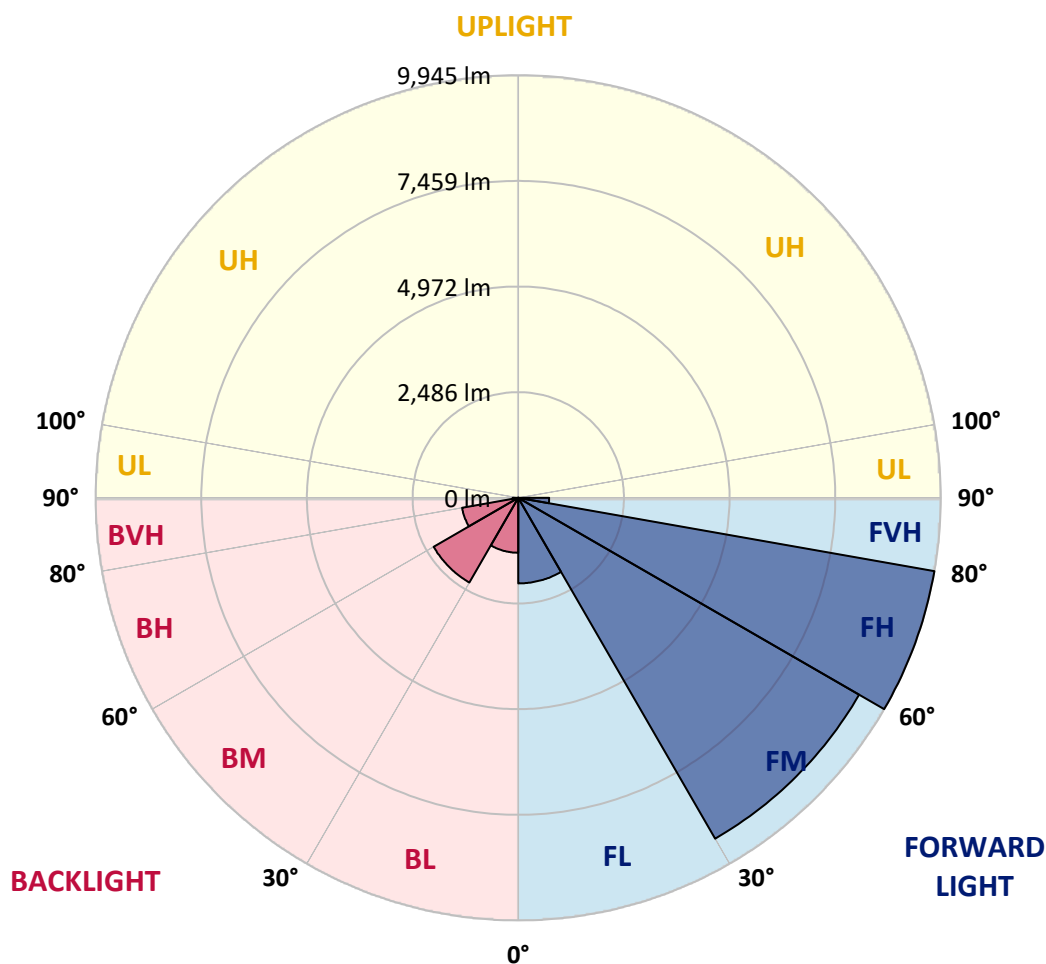
CATALOG NUMBER: NAV-SB4C-830-U-SL3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2014.4	7.5			
FM	(30°-60°)	9262.5	34.3			
FH	(60°-80°)	9944.7	36.8			G4/12000
FVH	(80°-90°)	728.1	2.7			G4/750
BL	(0°-30°)	1293.1	4.8	B3/2500		
BM	(30°-60°)	2300.0	8.5	B2/2500		
BH	(60°-80°)	1342.5	5.0	B3/2500		G3/2500
BVH	(80°-90°)	131.6	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 IV Medium



REPORT NUMBER: P966822

CATALOG NUMBER: NAV-SB4C-830-U-SL3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	4959.0	4959.0	4959.0	4959.0	4959.0	4959.0	4959.0	4959.0	4959.0	4959.0	4959.0
2.5°	5001.1	4983.7	5001.1	4993.8	4990.8	4985.1	4986.5	4996.7	4990.8	4998.1	4973.4
5°	4967.7	4957.4	4974.8	4970.5	4989.4	4992.4	5011.2	5022.8	5030.1	5031.5	5012.7
7.5°	4912.4	4902.3	4927.0	4947.3	4988.0	4999.6	5038.8	5057.8	5067.9	5085.3	5057.8
10°	4710.4	4706.0	4767.1	4844.0	4940.0	4999.6	5059.2	5091.2	5107.2	5153.7	5121.7
12.5°	4352.9	4358.7	4438.6	4586.9	4778.7	4970.5	5082.5	5128.9	5153.7	5211.8	5197.3
15°	4011.3	4009.8	4097.0	4255.5	4524.3	4842.6	5094.0	5174.0	5216.1	5301.9	5290.2
17.5°	3813.6	3807.9	3868.9	3989.5	4239.5	4646.4	5065.0	5198.7	5288.8	5396.3	5386.2
20°	3777.3	3765.6	3797.6	3857.3	4034.6	4431.3	4989.4	5198.7	5346.9	5486.5	5480.7
22.5°	3909.6	3890.7	3877.6	3870.3	3948.8	4254.1	4903.7	5181.3	5432.7	5615.9	5605.6
25°	4175.5	4146.4	4079.6	4014.2	3990.9	4174.1	4828.1	5176.9	5560.6	5790.2	5752.4
27.5°	4605.7	4569.3	4434.3	4277.2	4136.3	4214.8	4794.6	5203.1	5701.6	5974.8	5899.2
30°	5139.1	5099.9	4929.8	4688.6	4435.7	4365.9	4836.8	5280.1	5881.8	6220.4	6072.2
32.5°	5617.3	5573.6	5428.3	5182.7	4841.2	4627.6	4970.5	5426.9	6165.2	6561.9	6332.3
35°	6041.7	5990.8	5860.0	5633.3	5338.2	4995.2	5211.8	5687.0	6567.8	7117.2	6685.5
37.5°	6457.3	6397.7	6255.3	6015.5	5809.1	5485.0	5544.6	6021.4	7102.6	7791.5	7153.5
40°	6922.4	6836.6	6663.7	6426.9	6226.3	6059.1	5982.1	6431.2	7646.2	8544.4	7737.7
42.5°	7372.9	7291.5	7085.2	6883.2	6631.7	6583.8	6489.3	6910.8	8240.6	9371.4	8330.7
45°	7858.4	7761.0	7511.0	7255.3	7096.8	6932.6	6980.6	7390.4	8823.4	10214.3	8952.8
47.5°	8313.3	8204.3	7909.2	7624.4	7537.1	7226.1	7431.0	7917.9	9429.5	11068.9	9569.0
50°	8558.9	8451.3	8205.7	7948.5	7880.2	7588.1	7919.5	8497.9	10064.6	11920.5	10160.5
52.5°	8763.9	8647.5	8326.4	8183.9	8163.6	7981.9	8521.1	9160.6	10699.7	12673.4	10731.6
55°	8981.9	8852.5	8442.6	8314.7	8407.8	8423.8	9234.7	9912.0	11371.1	13407.3	11270.9
57.5°	9233.3	9069.0	8554.5	8425.2	8646.1	8941.2	10054.4	10691.0	12031.0	14087.5	11750.5
60°	9470.2	9304.4	8769.6	8601.1	8903.4	9541.4	10994.8	11634.3	12778.1	14693.6	12204.0
62.5°	9516.7	9380.1	8941.2	8939.6	9252.2	10241.9	12108.0	12586.2	13430.6	15292.4	12610.9
65°	8711.5	8625.8	8365.6	8926.6	9752.2	11250.5	13347.8	13804.1	14260.5	15815.5	12968.4
67.5°	6630.3	6641.9	6623.0	7705.7	9348.1	12699.5	15142.6	15107.8	15285.1	16402.8	13379.7
70°	3031.7	3100.0	3544.8	5319.3	7489.3	12866.7	18110.4	17658.5	16571.4	17162.8	13735.8
72.5°	1637.9	1690.2	1872.0	2576.8	4502.5	11439.5	20328.3	20649.4	18281.9	17674.5	13344.9
75°	1201.9	1231.0	1357.4	1637.9	1890.8	8502.2	19533.3	21181.4	18495.6	16481.2	11523.8
77.5°	899.6	912.8	1015.9	1297.9	967.9	4482.2	15607.8	17542.2	15833.0	13541.1	8512.4
80°	652.5	667.1	744.2	973.7	678.8	1639.4	10717.2	12312.9	10843.6	8631.5	4242.4
82.5°	450.6	456.3	489.7	662.8	473.8	636.6	6080.9	7220.3	6053.2	3028.9	1145.2
85°	271.8	279.0	293.6	386.6	268.9	302.3	2624.8	2714.9	1809.4	723.8	356.1
87.5°	111.9	119.2	130.8	162.8	106.1	84.3	433.1	543.6	338.7	212.2	110.5
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: P966822

CATALOG NUMBER: NAV-SB4C-830-U-SL3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4959.0	4959.0	4959.0	4959.0	4959.0	4959.0	4959.0	4959.0	4959.0	4959.0	4959.0
2.5°	4966.1	4956.0	4928.4	4890.6	4855.7	4812.1	4793.2	4777.2	4762.7	4735.1	4722.0
5°	4996.7	4969.1	4895.0	4799.0	4690.0	4570.9	4454.5	4374.6	4306.3	4255.5	4213.4
7.5°	5043.2	4990.8	4855.7	4659.5	4409.5	4153.7	3922.7	3758.4	3634.9	3589.9	3511.3
10°	5091.2	5028.6	4793.2	4447.3	4015.6	3621.8	3315.2	3146.5	3047.7	3015.8	2966.4
12.5°	5147.9	5056.3	4695.8	4152.3	3575.3	3143.7	2876.3	2777.4	2726.5	2709.1	2713.5
15°	5230.7	5079.5	4549.1	3783.2	3155.3	2794.9	2621.8	2553.6	2527.4	2525.9	2531.8
17.5°	5293.2	5083.9	4320.9	3387.8	2832.6	2584.1	2441.7	2415.5	2432.9	2459.1	2469.3
20°	5362.9	5044.6	4021.5	3027.3	2605.9	2399.5	2340.0	2357.4	2399.5	2437.3	2450.4
22.5°	5412.3	4973.4	3659.6	2746.9	2409.7	2293.4	2290.5	2326.9	2350.1	2369.0	2379.1
25°	5456.0	4852.8	3275.9	2511.5	2248.3	2229.5	2261.5	2249.8	2233.8	2249.8	2260.0
27.5°	5488.0	4662.4	2932.9	2305.0	2135.0	2185.9	2167.0	2140.8	2139.4	2148.1	2162.6
30°	5477.8	4408.1	2651.0	2108.8	2055.0	2104.5	2059.4	2055.0	2050.7	2055.0	2071.0
32.5°	5477.8	4118.9	2434.4	1973.6	2004.2	1985.3	1980.9	1970.8	1953.3	1951.9	1970.8
35°	5508.2	3829.6	2248.3	1901.0	1962.1	1917.0	1919.9	1895.2	1858.8	1841.4	1858.8
37.5°	5570.8	3597.1	2063.8	1866.1	1887.9	1886.5	1874.8	1832.7	1768.7	1713.5	1732.5
40°	5722.0	3528.8	1937.4	1850.1	1853.1	1870.5	1840.0	1758.6	1613.2	1523.1	1534.7
42.5°	5958.8	3643.6	1909.8	1810.9	1829.8	1847.3	1787.6	1598.7	1495.5	1441.8	1441.8
45°	6259.7	3844.2	1969.3	1754.2	1774.6	1805.1	1627.8	1537.7	1491.2	1492.6	1499.9
47.5°	6640.5	4054.9	2079.7	1704.8	1694.6	1712.1	1521.7	1466.5	1402.5	1418.5	1459.2
50°	7080.8	4268.5	2184.4	1637.9	1606.0	1549.3	1453.3	1401.1	1319.7	1281.9	1292.0
52.5°	7557.5	4474.9	2226.6	1556.6	1510.0	1444.6	1406.8	1343.0	1244.0	1181.6	1180.2
55°	8009.6	4662.4	2180.1	1459.2	1414.1	1363.2	1357.4	1318.3	1212.1	1124.9	1124.9
57.5°	8436.8	4819.3	2063.8	1360.4	1316.7	1286.3	1325.4	1306.6	1172.9	1061.0	1055.1
60°	8798.7	4927.0	1895.2	1260.0	1229.6	1213.6	1273.2	1267.3	1117.7	992.6	988.3
62.5°	9086.5	4969.1	1709.2	1164.2	1156.9	1127.8	1200.5	1200.5	1047.9	925.8	921.5
65°	9311.7	4928.4	1520.2	1069.7	1084.2	1040.6	1111.8	1103.1	973.7	866.2	860.4
67.5°	9510.9	4794.6	1311.0	976.6	1010.1	954.9	1018.8	998.5	892.4	806.6	800.8
70°	9599.5	4483.7	1072.6	883.7	924.3	870.5	925.8	888.1	800.8	742.7	731.0
72.5°	8887.4	3726.5	844.4	786.3	821.1	777.6	825.5	781.9	702.0	675.8	654.1
75°	7352.6	2796.3	649.6	680.2	706.3	672.9	704.9	672.9	600.2	619.1	565.4
77.5°	5339.6	1887.9	497.0	568.3	579.9	562.4	590.1	553.7	488.3	484.0	462.2
80°	2655.3	1106.0	389.5	449.1	444.7	433.1	465.0	447.6	392.4	415.6	411.3
82.5°	768.9	473.8	283.4	315.4	306.7	309.5	332.8	341.5	511.6	507.3	518.9
85°	241.3	186.0	170.0	175.9	167.2	171.5	196.2	389.5	360.4	210.7	228.2
87.5°	62.5	64.0	42.1	45.1	46.5	55.2	62.5	236.9	113.4	74.1	78.5
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)