

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: P968401

Luminaire Tested: **NAV-SB5B-830-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968401
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-830-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26039.1 lumens
Efficiency: N/A
Efficacy: 142.5 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



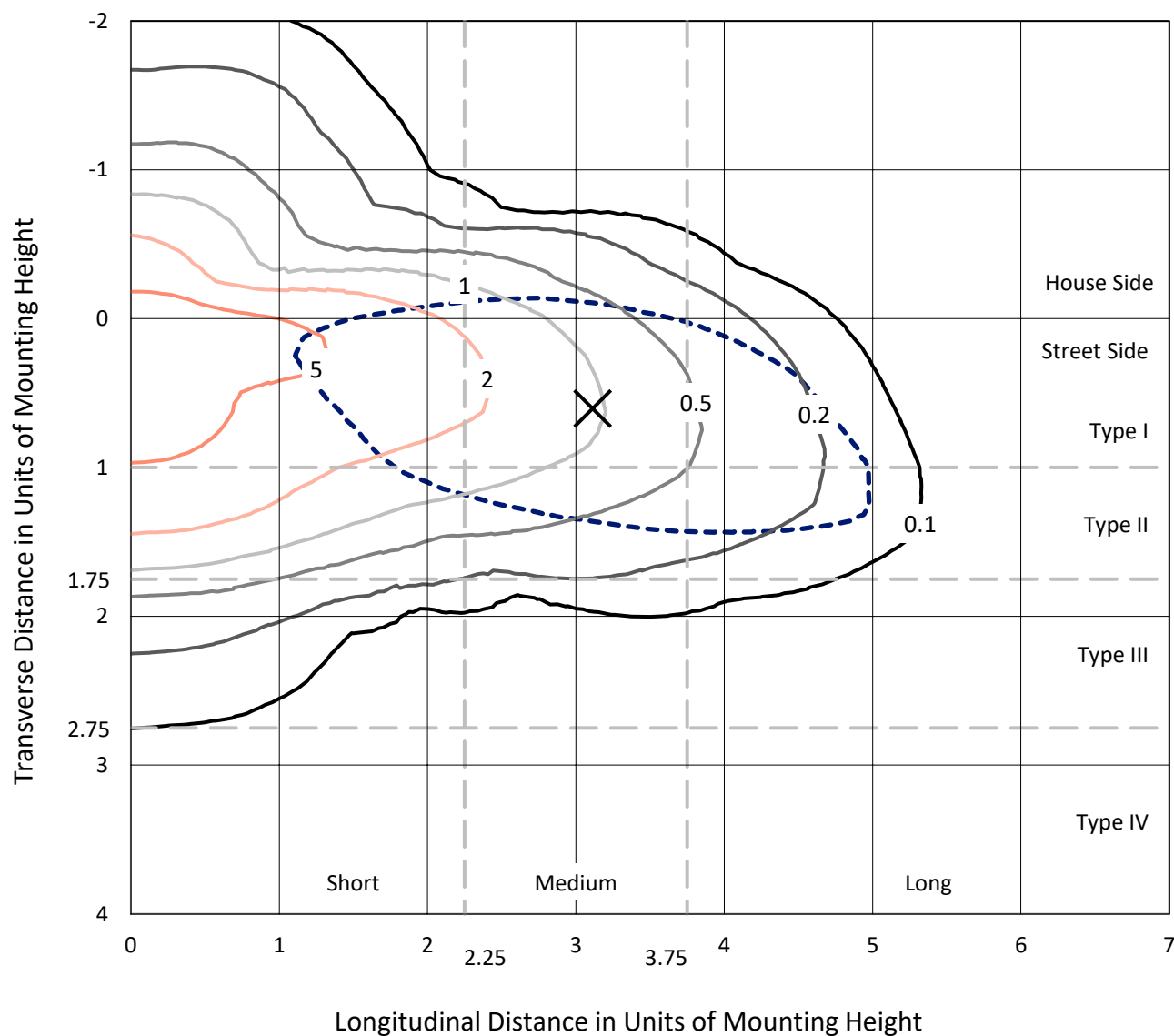
REPORT NUMBER: P968401

CATALOG NUMBER: NAV-SB5B-830-U-SL2

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

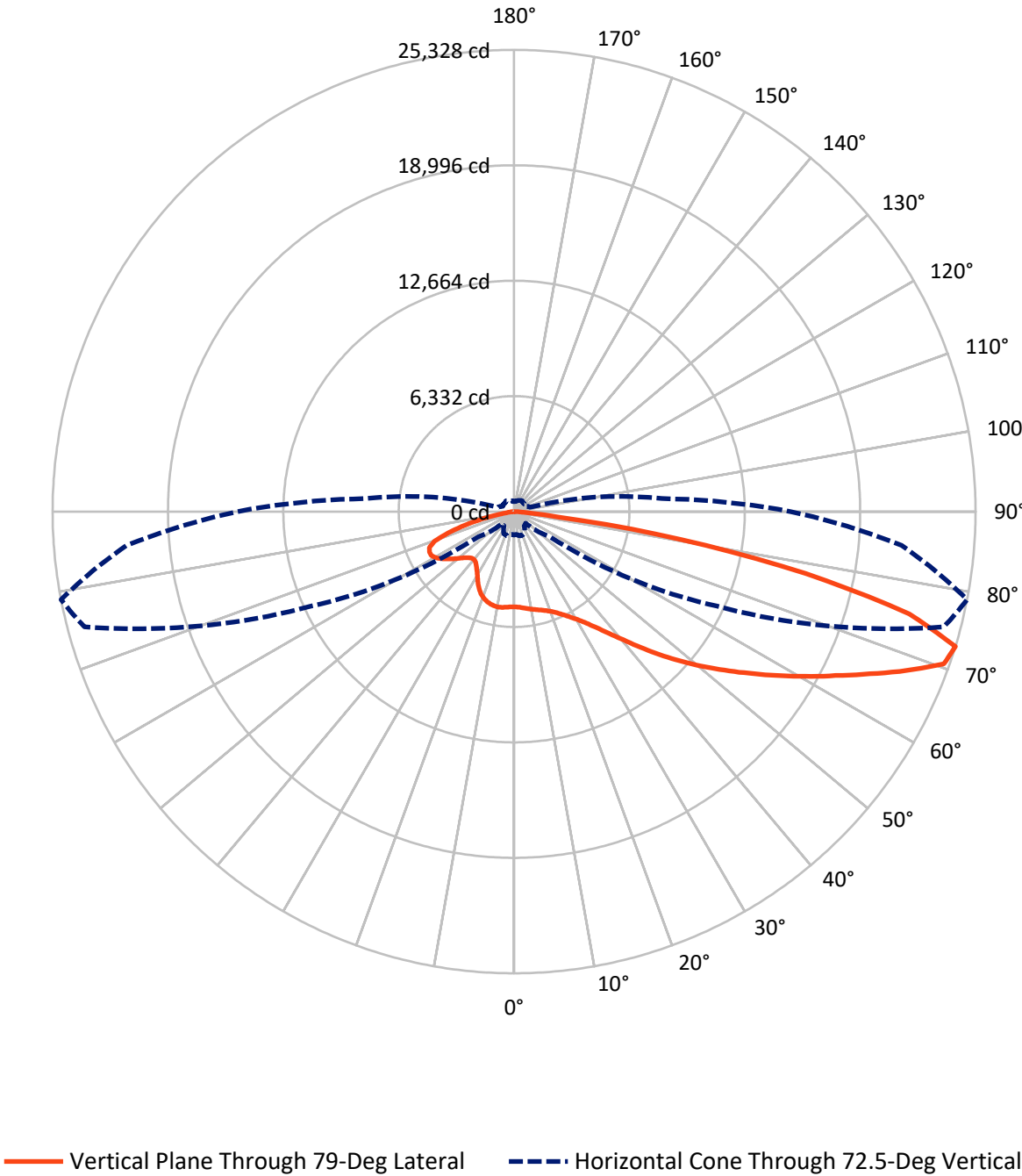
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.4 fc
Type II - Medium - N/A

REPORT NUMBER: P968401
CATALOG NUMBER: NAV-SB5B-830-U-SL2

Luminous Intensity Polar Plot



REPORT NUMBER: P968401

CATALOG NUMBER: NAV-SB5B-830-U-SL2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5730.0	0.0	5730.0
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	20309.1	0.0	20309.1
	% Fixture	78.0	0.0	78.0
Total	Lumens	26039.1	0.0	26039.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	474.5	1.8
10°-20°	1240.5	4.8
20°-30°	2001.7	7.7
30°-40°	3004.2	11.5
40°-50°	4261.6	16.4
50°-60°	5381.9	20.7
60°-70°	5466.0	21.0
70°-80°	3725.3	14.3
80°-90°	483.3	1.9
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°	26039.1	100.0
0°-180°	26039.1	100.0

Coefficient of Utilization



REPORT NUMBER: P968401

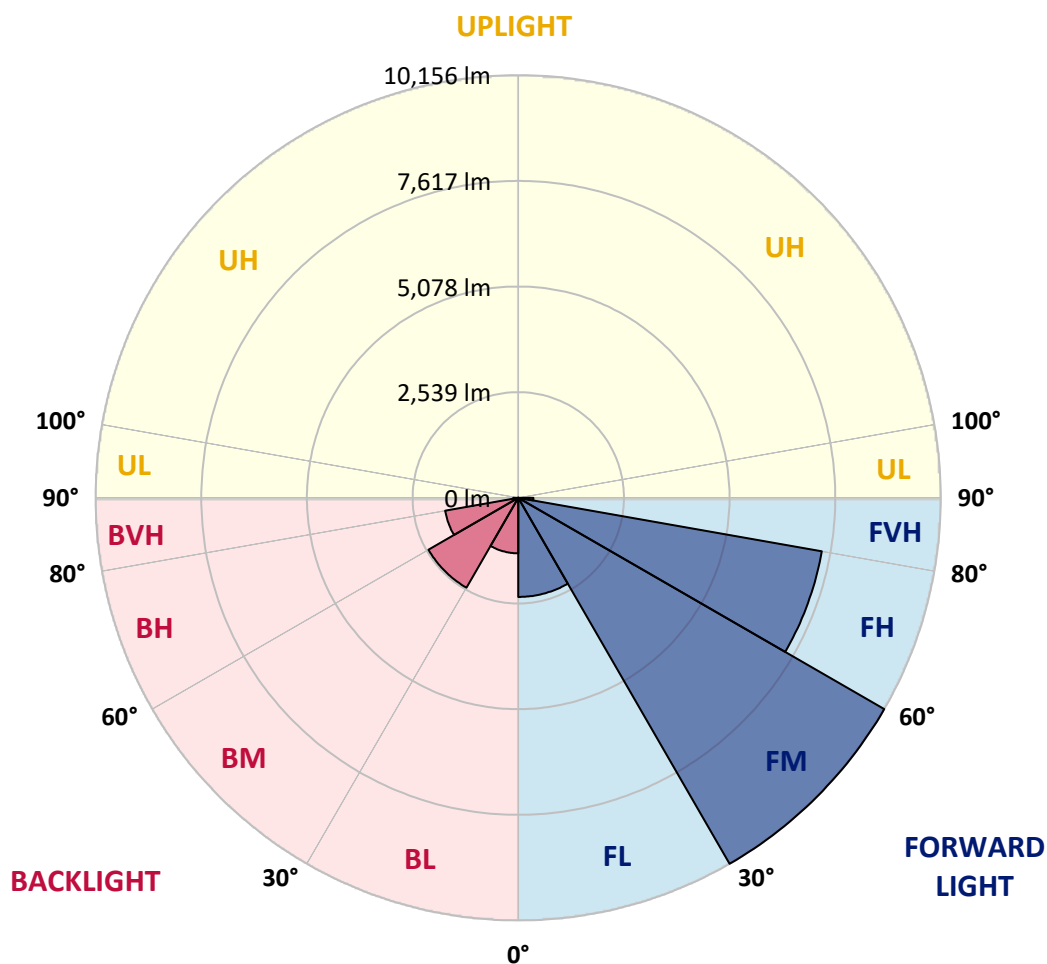
CATALOG NUMBER: NAV-SB5B-830-U-SL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2381.9	9.1			
FM	(30°-60°)	10155.8	39.0			
FH	(60°-80°)	7407.2	28.4			G3/7500
FVH	(80°-90°)	364.1	1.4			G3/500
BL	(0°-30°)	1334.7	5.1	B3/2500		
BM	(30°-60°)	2492.0	9.6	B2/2500		
BH	(60°-80°)	1784.1	6.9	B3/2500		G3/2500
BVH	(80°-90°)	119.2	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: P968401

CATALOG NUMBER: NAV-SB5B-830-U-SL2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	5227.1	5227.1	5227.1	5227.1	5227.1	5227.1	5227.1	5227.1	5227.1	5227.1	5227.1
2.5°	5229.9	5205.1	5220.2	5214.7	5221.6	5229.9	5232.6	5236.7	5250.6	5249.1	5247.8
5°	5218.8	5194.1	5214.7	5207.8	5225.8	5245.0	5261.5	5276.7	5298.7	5308.4	5294.6
7.5°	5195.4	5178.9	5199.5	5220.2	5253.2	5282.2	5305.6	5340.0	5371.7	5377.3	5386.9
10°	5059.1	5046.7	5094.9	5148.6	5239.5	5318.0	5369.0	5408.9	5443.4	5448.9	5462.6
12.5°	4917.2	4902.1	4955.8	5028.8	5176.1	5318.0	5425.4	5477.8	5508.0	5526.0	5546.7
15°	4893.8	4881.4	4911.7	4975.0	5097.6	5280.8	5464.0	5560.4	5586.6	5607.3	5615.6
17.5°	5006.7	4983.3	4995.7	5017.8	5089.3	5246.4	5494.3	5654.1	5694.0	5716.1	5716.1
20°	5268.4	5235.4	5216.1	5172.0	5159.6	5251.9	5491.5	5767.1	5819.3	5846.9	5853.8
22.5°	5616.9	5594.9	5553.6	5441.9	5320.8	5319.3	5543.9	5911.7	6009.5	6035.6	6019.1
25°	6038.4	6005.3	5953.0	5801.5	5568.7	5453.0	5632.1	6096.2	6260.1	6267.1	6218.8
27.5°	6523.2	6473.6	6401.9	6202.3	5888.2	5662.3	5767.1	6308.4	6548.0	6545.2	6446.0
30°	7034.2	6984.7	6908.9	6666.5	6271.2	5944.7	5954.3	6536.9	6889.5	6874.5	6705.0
32.5°	7407.5	7370.3	7355.1	7167.8	6711.9	6278.0	6169.3	6790.4	7311.0	7297.3	7060.4
35°	7694.0	7645.8	7663.6	7568.6	7192.6	6651.3	6432.3	7092.1	7823.4	7822.1	7527.3
37.5°	7977.7	7935.0	7950.1	7886.8	7637.5	7125.1	6753.2	7461.2	8458.4	8488.7	8092.1
40°	8236.7	8191.2	8251.8	8192.6	7983.2	7629.2	7118.2	7878.6	9193.9	9251.8	8775.2
42.5°	8392.3	8356.5	8457.1	8458.4	8283.4	8054.9	7519.0	8338.6	10045.1	10174.6	9615.4
45°	8446.0	8433.6	8585.1	8616.8	8549.3	8301.4	7879.9	8839.9	10962.5	11193.8	10572.7
47.5°	8388.2	8364.7	8574.1	8691.2	8744.9	8417.1	8178.8	9382.6	11899.0	12237.9	11616.7
50°	8096.2	8050.7	8361.9	8608.6	8800.0	8492.8	8480.4	10009.3	12963.8	13334.2	12666.2
52.5°	7571.4	7536.9	7891.0	8319.3	8678.8	8530.0	8819.3	10693.8	13974.7	14454.0	13742.0
55°	6900.6	6855.1	7244.9	7804.1	8377.1	8517.6	9158.1	11459.7	15167.5	15653.8	14853.5
57.5°	5837.3	5746.4	6239.5	6900.6	7885.4	8502.5	9510.7	12221.4	16379.6	16962.2	16039.4
60°	4286.3	4151.4	4756.0	5539.7	6924.0	8355.1	9947.3	13075.3	17834.1	18358.9	17334.2
62.5°	2495.8	2417.3	2812.6	3543.9	5218.8	7487.3	10192.5	14068.4	19263.8	19814.8	18606.8
65°	1938.0	1915.9	1950.4	2006.8	2904.8	5605.8	9436.4	15036.6	21082.0	21467.6	19933.3
67.5°	1772.6	1756.1	1771.3	1665.2	1473.7	3122.5	7465.3	15281.8	23029.6	23263.7	21094.4
70°	1575.7	1556.5	1606.0	1515.1	1159.8	1420.0	4823.5	14392.1	24579.1	25018.5	21977.2
72.5°	1283.7	1261.7	1377.4	1336.1	976.5	911.8	2422.8	12277.9	24416.5	25328.4	21345.0
75°	986.2	973.7	1111.5	1145.9	796.1	717.6	1162.5	9126.4	21486.9	22405.6	18396.1
77.5°	765.8	756.1	826.5	951.7	641.9	556.5	714.8	5789.1	16192.3	16353.5	12677.3
80°	574.4	546.8	611.5	736.9	500.0	406.3	484.8	3375.9	10235.2	9277.9	5517.7
82.5°	359.5	345.7	399.4	491.7	352.6	279.6	315.4	1865.0	4101.8	2415.9	1064.7
85°	205.2	199.7	217.6	281.0	191.5	161.1	180.4	823.7	749.3	515.2	320.9
87.5°	82.6	79.8	99.2	125.4	70.2	59.2	63.3	198.3	165.3	152.9	106.1
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: P968401

CATALOG NUMBER: NAV-SB5B-830-U-SL2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5227.1	5227.1	5227.1	5227.1	5227.1	5227.1	5227.1	5227.1	5227.1	5227.1	5227.1
2.5°	5242.3	5242.3	5223.0	5192.6	5158.2	5136.2	5100.4	5090.8	5053.6	5042.5	5060.4
5°	5305.6	5294.6	5235.4	5150.0	5032.9	4925.4	4807.0	4732.6	4628.0	4590.8	4618.3
7.5°	5385.5	5355.2	5253.2	5066.0	4820.8	4579.7	4329.1	4139.0	3957.2	3892.4	3900.7
10°	5458.5	5415.8	5242.3	4914.5	4490.2	4072.8	3673.4	3393.9	3181.7	3095.0	3114.3
12.5°	5531.5	5453.0	5169.3	4662.4	4020.6	3454.5	3028.9	2811.2	2680.4	2575.7	2610.1
15°	5600.4	5490.2	5056.3	4324.9	3505.4	2931.0	2617.0	2443.4	2338.7	2269.9	2282.3
17.5°	5680.2	5521.9	4886.9	3896.5	3015.0	2568.8	2312.6	2208.0	2187.2	2178.9	2184.5
20°	5791.9	5550.8	4663.8	3417.2	2654.1	2279.5	2147.3	2137.6	2136.3	2132.2	2145.9
22.5°	5911.7	5585.2	4369.0	2982.0	2347.0	2099.1	2075.7	2056.5	2044.1	2042.6	2057.8
25°	6053.5	5596.2	3999.9	2625.2	2085.4	2013.7	1986.1	1957.2	1948.9	1948.9	1957.2
27.5°	6191.3	5559.1	3570.2	2315.4	1938.0	1935.2	1899.4	1889.8	1888.4	1892.5	1903.5
30°	6329.0	5488.8	3143.2	2028.9	1852.6	1852.6	1840.2	1847.0	1852.6	1866.3	1876.0
32.5°	6514.9	5414.5	2786.4	1816.7	1778.2	1764.4	1776.8	1790.6	1796.1	1813.9	1829.1
35°	6787.7	5362.1	2502.6	1701.1	1701.1	1683.2	1690.0	1687.3	1674.8	1666.6	1685.9
37.5°	7148.6	5359.3	2268.5	1647.4	1636.3	1633.5	1635.0	1617.0	1568.9	1511.0	1512.4
40°	7582.4	5433.7	2088.1	1610.2	1601.9	1618.4	1610.2	1561.9	1429.7	1329.1	1326.5
42.5°	8165.0	5645.8	1972.4	1564.7	1589.5	1610.2	1577.1	1410.4	1320.9	1253.4	1250.6
45°	8851.0	5990.2	1913.2	1516.5	1566.1	1590.9	1431.1	1358.1	1286.5	1205.2	1199.7
47.5°	9627.8	6424.0	1899.4	1471.0	1513.7	1528.9	1369.1	1336.1	1254.8	1166.7	1159.8
50°	10473.4	6937.8	1936.5	1417.3	1438.0	1385.6	1348.5	1318.1	1234.1	1147.4	1137.8
52.5°	11348.1	7503.9	2010.9	1344.3	1362.2	1304.4	1340.2	1314.0	1221.7	1104.6	1096.3
55°	12207.5	8074.1	2082.6	1258.9	1285.0	1231.3	1316.7	1297.4	1165.2	1033.0	1026.1
57.5°	13080.8	8641.6	2152.8	1183.2	1210.7	1161.1	1279.6	1253.4	1101.9	966.9	964.1
60°	13988.5	9192.5	2185.9	1110.2	1129.4	1096.3	1223.1	1177.6	1030.2	899.4	895.3
62.5°	14838.3	9651.2	2132.2	1037.2	1049.6	1035.8	1148.7	1088.1	958.7	823.7	822.3
65°	15690.9	9923.9	1966.9	965.6	968.3	961.4	1044.1	991.7	874.6	757.6	749.3
67.5°	16463.7	10076.8	1703.8	888.4	881.5	878.7	946.3	887.0	793.3	691.5	683.2
70°	16627.6	9688.4	1301.6	797.4	797.4	790.6	838.9	778.2	703.9	621.2	618.5
72.5°	15186.8	8149.9	924.2	694.2	705.2	691.5	731.3	680.4	612.9	557.8	541.3
75°	12246.2	5976.4	672.2	588.1	607.4	584.0	621.2	585.4	527.6	526.1	473.9
77.5°	8414.3	3695.4	487.6	484.8	498.6	468.3	511.0	491.7	439.4	415.9	389.8
80°	3590.8	1473.7	355.4	374.6	374.6	347.1	396.7	402.2	356.7	345.7	345.7
82.5°	714.8	418.7	249.3	257.6	242.4	234.1	281.0	311.3	429.8	478.0	479.3
85°	214.8	154.3	150.2	140.5	123.9	125.4	165.3	312.6	385.7	220.4	190.0
87.5°	59.2	38.5	40.0	31.7	26.1	34.4	56.5	236.9	129.5	55.1	46.8
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)