

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: P968370

Luminaire Tested: **NAV-SB5B-827-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968370
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-827-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 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: 25199.6 lumens
Efficiency: N/A
Efficacy: 137.9 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



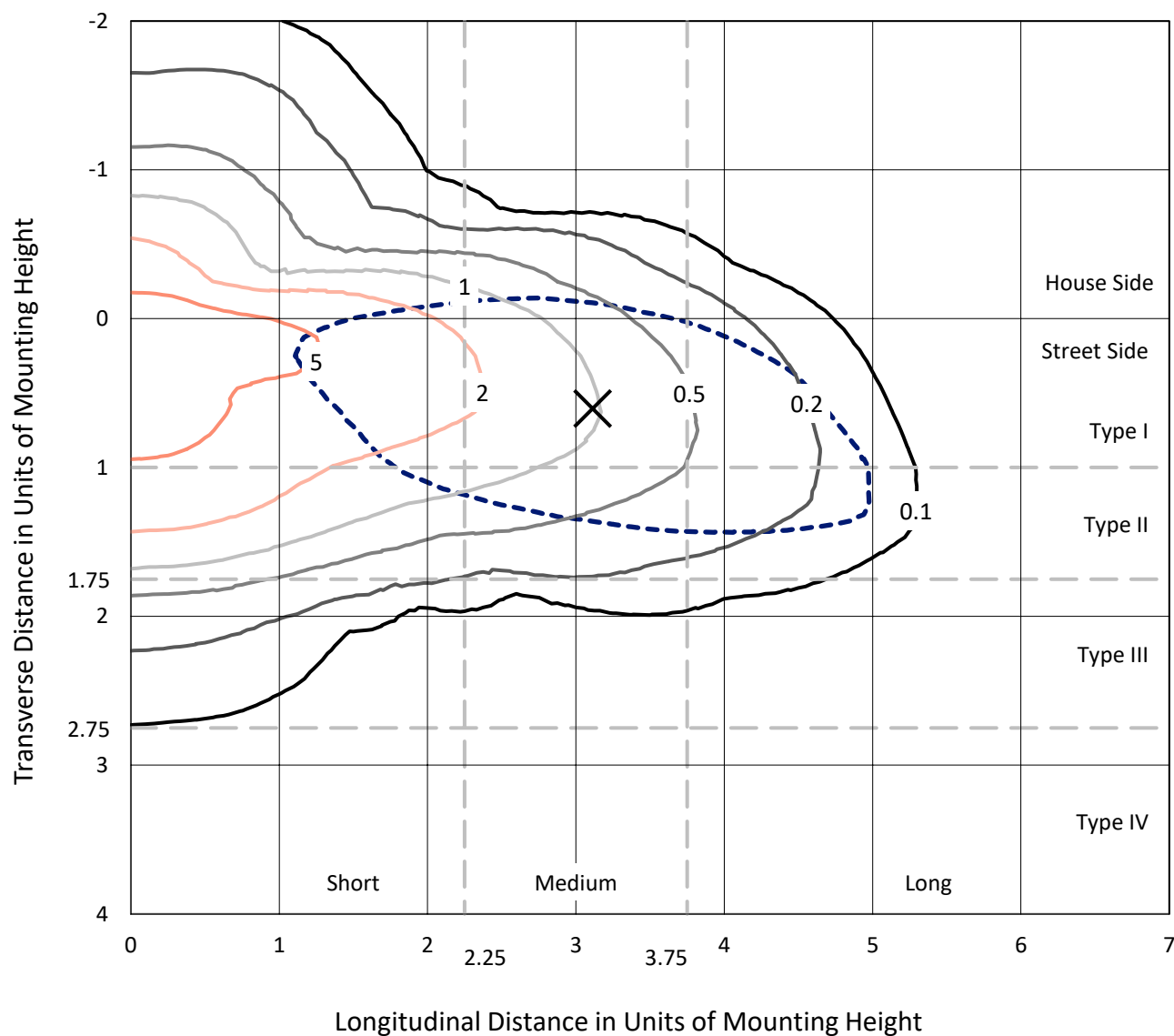
REPORT NUMBER: P968370

CATALOG NUMBER: NAV-SB5B-827-U-SL2

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

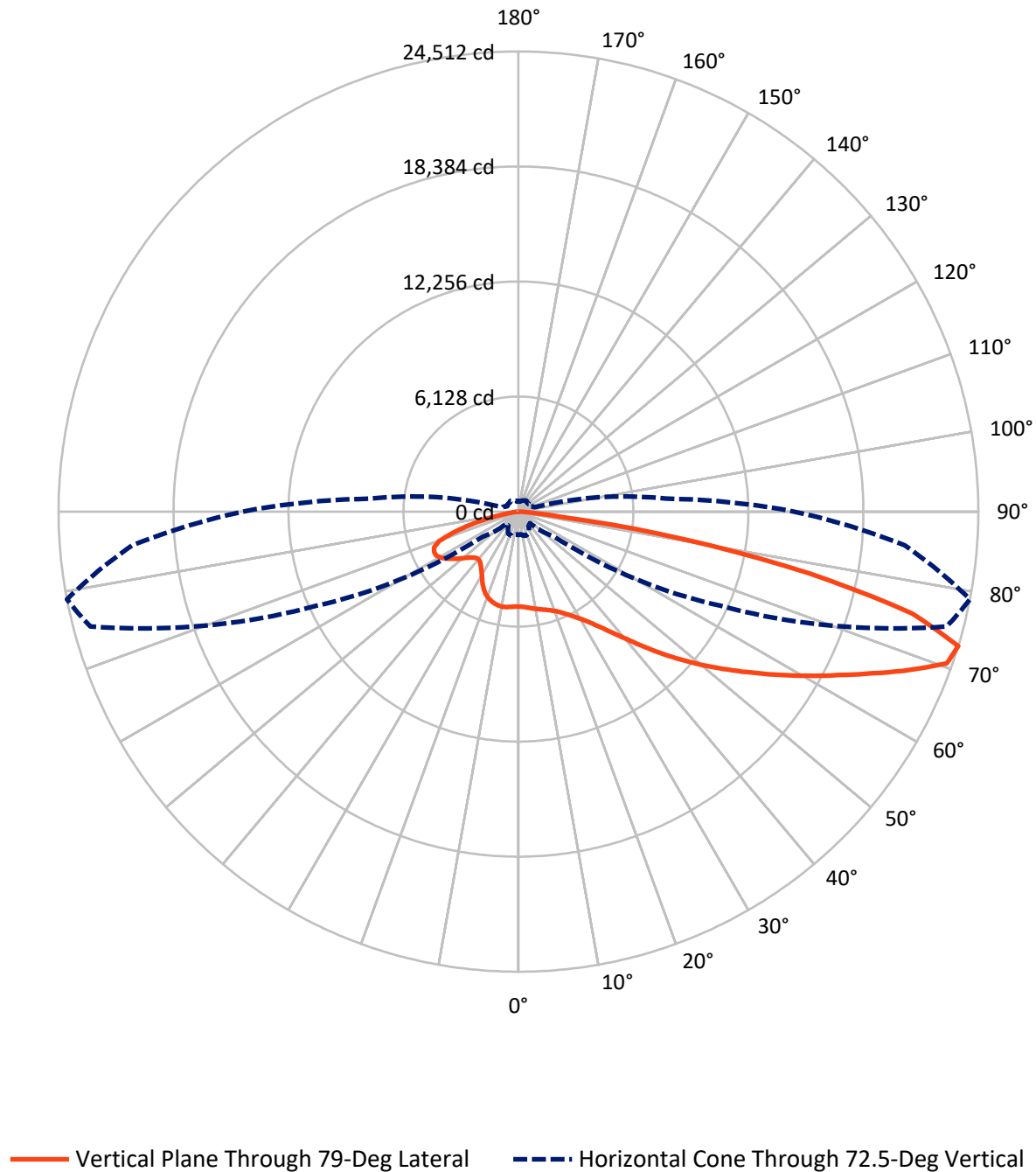
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 fc
Type II - Medium - N/A

REPORT NUMBER: P968370
CATALOG NUMBER: NAV-SB5B-827-U-SL2

Luminous Intensity Polar Plot



REPORT NUMBER: P968370

CATALOG NUMBER: NAV-SB5B-827-U-SL2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5545.3	0.0	5545.3
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	19654.3	0.0	19654.3
	% Fixture	78.0	0.0	78.0
Total	Lumens	25199.6	0.0	25199.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	459.2	1.8
10°-20°	1200.5	4.8
20°-30°	1937.1	7.7
30°-40°	2907.4	11.5
40°-50°	4124.3	16.4
50°-60°	5208.4	20.7
60°-70°	5289.8	21.0
70°-80°	3605.2	14.3
80°-90°	467.7	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°	25199.6	100.0
0°-180°	25199.6	100.0

Coefficient of Utilization



REPORT NUMBER: P968370

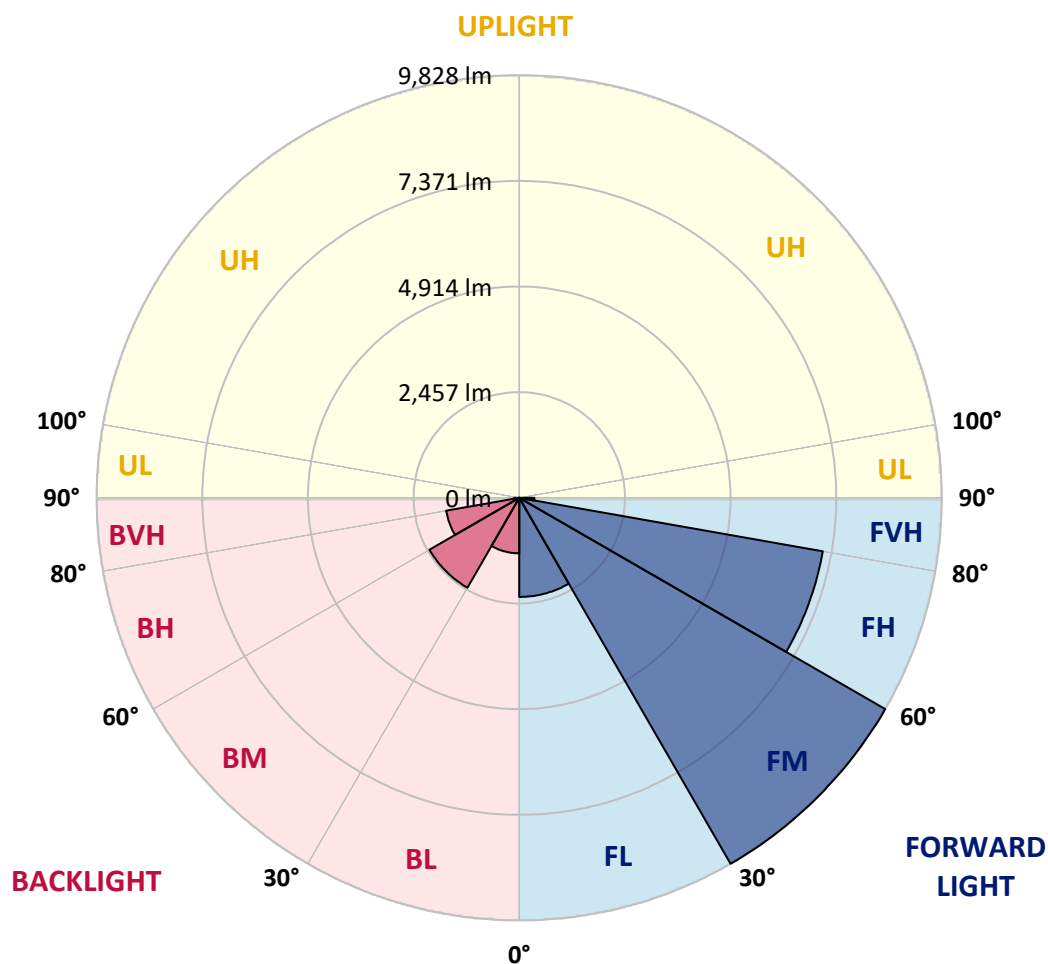
CATALOG NUMBER: NAV-SB5B-827-U-SL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2305.2	9.1			
FM	(30°-60°)	9828.4	39.0			
FH	(60°-80°)	7168.4	28.4			G3/7500
FVH	(80°-90°)	352.4	1.4			G3/500
BL	(0°-30°)	1291.7	5.1	B3/2500		
BM	(30°-60°)	2411.6	9.6	B2/2500		
BH	(60°-80°)	1726.6	6.9	B3/2500		G3/2500
BVH	(80°-90°)	115.4	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: P968370

CATALOG NUMBER: NAV-SB5B-827-U-SL2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	5058.6	5058.6	5058.6	5058.6	5058.6	5058.6	5058.6	5058.6	5058.6	5058.6	5058.6
2.5°	5061.2	5037.3	5051.9	5046.6	5053.2	5061.2	5063.9	5067.9	5081.2	5079.9	5078.6
5°	5050.6	5026.6	5046.6	5039.9	5057.2	5075.9	5091.9	5106.5	5127.9	5137.2	5123.9
7.5°	5027.9	5011.9	5031.9	5051.9	5083.9	5111.9	5134.5	5167.8	5198.6	5203.9	5213.3
10°	4896.0	4883.9	4930.7	4982.6	5070.6	5146.5	5195.9	5234.6	5267.9	5273.2	5286.5
12.5°	4758.7	4744.0	4796.0	4866.6	5009.3	5146.5	5250.6	5301.2	5330.5	5347.8	5367.8
15°	4736.0	4724.0	4753.3	4814.6	4933.3	5110.5	5287.9	5381.1	5406.5	5426.5	5434.4
17.5°	4845.3	4822.6	4834.6	4855.9	4925.3	5077.2	5317.2	5471.8	5510.5	5531.8	5531.8
20°	5098.6	5066.6	5047.9	5005.3	4993.3	5082.6	5314.5	5581.1	5631.8	5658.4	5665.1
22.5°	5435.8	5414.5	5374.5	5266.6	5149.2	5147.9	5365.2	5721.0	5815.7	5841.1	5825.1
25°	5843.7	5811.7	5761.0	5614.4	5389.1	5277.2	5450.4	5899.7	6058.3	6064.9	6018.3
27.5°	6312.9	6264.9	6195.6	6002.3	5698.4	5479.8	5581.1	6105.0	6336.9	6334.2	6238.3
30°	6807.4	6759.5	6686.2	6451.6	6068.9	5753.0	5762.3	6326.2	6667.4	6652.8	6488.9
32.5°	7168.6	7132.7	7118.0	6936.7	6495.5	6075.6	5970.3	6571.5	7075.4	7062.0	6832.8
35°	7445.9	7399.3	7416.6	7324.6	6960.7	6436.9	6224.9	6863.4	7571.3	7569.9	7284.7
37.5°	7720.5	7679.2	7693.9	7632.6	7391.3	6895.4	6535.5	7220.6	8185.8	8215.1	7831.1
40°	7971.1	7927.1	7985.8	7928.5	7725.8	7383.3	6888.7	7624.6	8897.5	8953.5	8492.3
42.5°	8121.7	8087.0	8184.4	8185.8	8016.4	7795.1	7276.7	8069.7	9721.3	9846.6	9305.4
45°	8173.8	8161.8	8308.3	8339.0	8273.7	8033.7	7625.9	8555.0	10609.1	10833.0	10231.8
47.5°	8117.7	8095.0	8297.7	8410.9	8463.0	8145.7	7915.2	9080.2	11515.5	11843.4	11242.2
50°	7835.1	7791.1	8092.4	8331.0	8516.3	8219.1	8207.1	9686.7	12545.8	12904.3	12257.9
52.5°	7327.3	7294.0	7636.6	8051.1	8399.0	8255.0	8535.0	10349.1	13524.3	13988.1	13299.0
55°	6678.2	6634.1	7011.4	7552.5	8107.0	8243.0	8862.9	11090.2	14678.5	15149.1	14374.6
57.5°	5649.1	5561.1	6038.3	6678.2	7631.2	8228.4	9204.1	11827.4	15851.5	16415.4	15522.3
60°	4148.2	4017.6	4602.8	5361.2	6700.8	8085.7	9626.6	12653.8	17259.2	17767.0	16775.4
62.5°	2415.3	2339.4	2721.9	3429.8	5050.6	7245.9	9863.9	13614.9	18642.8	19176.0	18007.0
65°	1875.4	1854.1	1887.4	1942.2	2811.2	5425.1	9132.1	14551.9	20402.3	20775.5	19290.6
67.5°	1715.5	1699.6	1714.2	1611.5	1426.3	3021.8	7224.6	14789.2	22287.1	22513.7	20414.3
70°	1524.9	1506.2	1554.2	1466.3	1122.4	1374.3	4668.1	13928.1	23786.7	24211.9	21268.7
72.5°	1242.3	1221.0	1332.9	1292.9	945.0	882.4	2344.7	11882.0	23629.4	24511.8	20656.9
75°	954.4	942.4	1075.7	1109.0	770.5	694.4	1125.0	8832.2	20794.2	21683.3	17803.0
77.5°	741.1	731.7	799.8	921.1	621.2	538.5	691.8	5602.4	15670.3	15826.2	12268.5
80°	555.9	529.2	591.8	713.1	483.9	393.2	469.2	3267.1	9905.2	8978.8	5339.8
82.5°	347.9	334.6	386.5	475.9	341.2	270.6	305.2	1804.8	3969.5	2338.0	1030.3
85°	198.6	193.3	210.6	271.9	185.3	156.0	174.7	797.1	725.1	498.6	310.6
87.5°	79.9	77.3	95.9	121.3	68.0	57.3	61.3	192.0	160.0	147.9	102.6
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: P968370

CATALOG NUMBER: NAV-SB5B-827-U-SL2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5058.6	5058.6	5058.6	5058.6	5058.6	5058.6	5058.6	5058.6	5058.6	5058.6	5058.6
2.5°	5073.2	5073.2	5054.6	5025.3	4992.0	4970.6	4936.0	4926.7	4890.6	4879.9	4897.3
5°	5134.5	5123.9	5066.6	4984.0	4870.6	4766.7	4652.1	4580.0	4478.7	4442.8	4469.4
7.5°	5211.9	5182.5	5083.9	4902.7	4665.4	4432.1	4189.5	4005.6	3829.6	3767.0	3775.0
10°	5282.5	5241.2	5073.2	4756.0	4345.5	3941.5	3555.0	3284.4	3079.1	2995.2	3013.8
12.5°	5353.2	5277.2	5002.6	4512.0	3890.9	3343.0	2931.2	2720.6	2594.0	2492.6	2526.0
15°	5419.8	5313.2	4893.2	4185.5	3392.3	2836.6	2532.7	2364.7	2263.4	2196.7	2208.7
17.5°	5497.2	5343.8	4729.3	3771.0	2917.9	2485.9	2238.1	2136.7	2116.7	2108.7	2114.1
20°	5605.1	5371.8	4513.4	3307.1	2568.6	2206.0	2078.1	2068.8	2067.4	2063.4	2076.8
22.5°	5721.0	5405.1	4228.1	2885.9	2271.4	2031.4	2008.8	1990.1	1978.1	1976.8	1991.5
25°	5858.4	5415.8	3870.9	2540.7	2018.1	1948.8	1922.1	1894.1	1886.1	1886.1	1894.1
27.5°	5991.6	5379.8	3455.1	2240.8	1875.4	1872.8	1838.1	1828.8	1827.5	1831.5	1842.1
30°	6125.0	5311.9	3041.8	1963.5	1792.8	1792.8	1780.8	1787.5	1792.8	1806.2	1815.5
32.5°	6304.9	5239.9	2696.6	1758.2	1720.9	1707.5	1719.5	1732.9	1738.2	1755.5	1770.2
35°	6568.8	5189.2	2422.0	1646.3	1646.3	1628.8	1635.6	1632.9	1620.8	1612.8	1631.5
37.5°	6918.0	5186.5	2195.3	1594.2	1583.5	1580.9	1582.2	1564.9	1518.2	1462.3	1463.6
40°	7338.0	5258.6	2020.8	1558.2	1550.2	1566.2	1558.2	1511.6	1383.6	1286.3	1283.6
42.5°	7901.8	5463.8	1908.8	1514.2	1538.2	1558.2	1526.2	1365.0	1278.3	1213.0	1210.3
45°	8565.6	5797.1	1851.5	1467.6	1515.6	1539.6	1385.0	1314.3	1245.0	1166.3	1161.0
47.5°	9317.4	6216.9	1838.1	1423.6	1464.9	1479.6	1324.9	1292.9	1214.3	1129.0	1122.4
50°	10135.8	6714.2	1874.1	1371.7	1391.6	1341.0	1304.9	1275.6	1194.3	1110.4	1101.1
52.5°	10982.3	7261.9	1946.2	1300.9	1318.3	1262.3	1296.9	1271.6	1182.3	1069.1	1061.1
55°	11814.0	7813.8	2015.5	1218.3	1243.6	1191.7	1274.3	1255.6	1127.7	999.7	993.0
57.5°	12659.2	8363.0	2083.4	1145.0	1171.7	1123.7	1238.3	1213.0	1066.4	935.7	933.1
60°	13537.6	8896.2	2115.4	1074.4	1093.1	1061.1	1183.7	1139.7	997.0	870.4	866.4
62.5°	14359.9	9340.0	2063.4	1003.7	1015.7	1002.3	1111.7	1053.1	927.7	797.1	795.8
65°	15185.1	9603.9	1903.4	934.4	937.1	930.4	1010.3	959.7	846.4	733.1	725.1
67.5°	15932.9	9752.0	1648.9	859.8	853.1	850.4	915.7	858.4	767.8	669.1	661.1
70°	16091.5	9376.1	1259.6	771.8	771.8	765.2	811.8	753.2	681.1	601.2	598.5
72.5°	14697.3	7887.2	894.4	671.8	682.4	669.1	707.8	658.5	593.2	539.9	523.9
75°	11851.4	5783.7	650.5	569.2	587.8	565.2	601.2	566.5	510.6	509.2	458.6
77.5°	8143.0	3576.3	471.9	469.2	482.6	453.3	494.6	475.9	425.2	402.5	377.2
80°	3475.1	1426.3	343.9	362.5	362.5	335.9	383.9	389.2	345.2	334.6	334.6
82.5°	691.8	405.2	241.3	249.3	234.6	226.6	271.9	301.2	415.8	462.6	463.9
85°	208.0	149.3	145.2	135.9	119.9	121.3	160.0	302.6	373.2	213.3	184.0
87.5°	57.3	37.3	38.6	30.6	25.3	33.3	54.6	229.3	125.3	53.3	45.3
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)