

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: P971555

Luminaire Tested: **NAV-SB6D-827-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P971555
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6D-827-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 54892.8 lumens
Efficiency: N/A
Efficacy: 124.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

Input Watts (W): 440.1
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

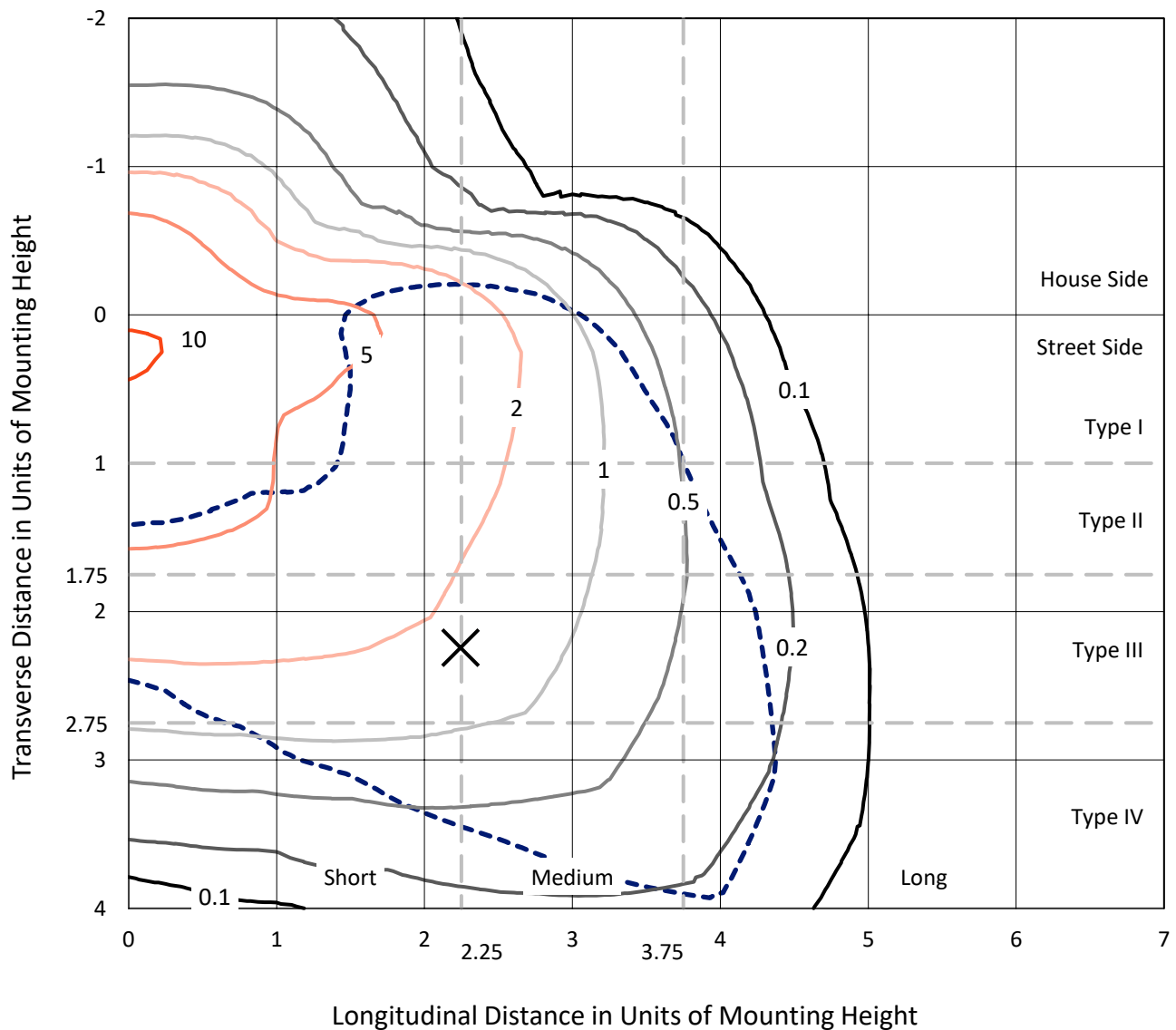


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Iso-Footcandle Lines of Horizontal Illumination

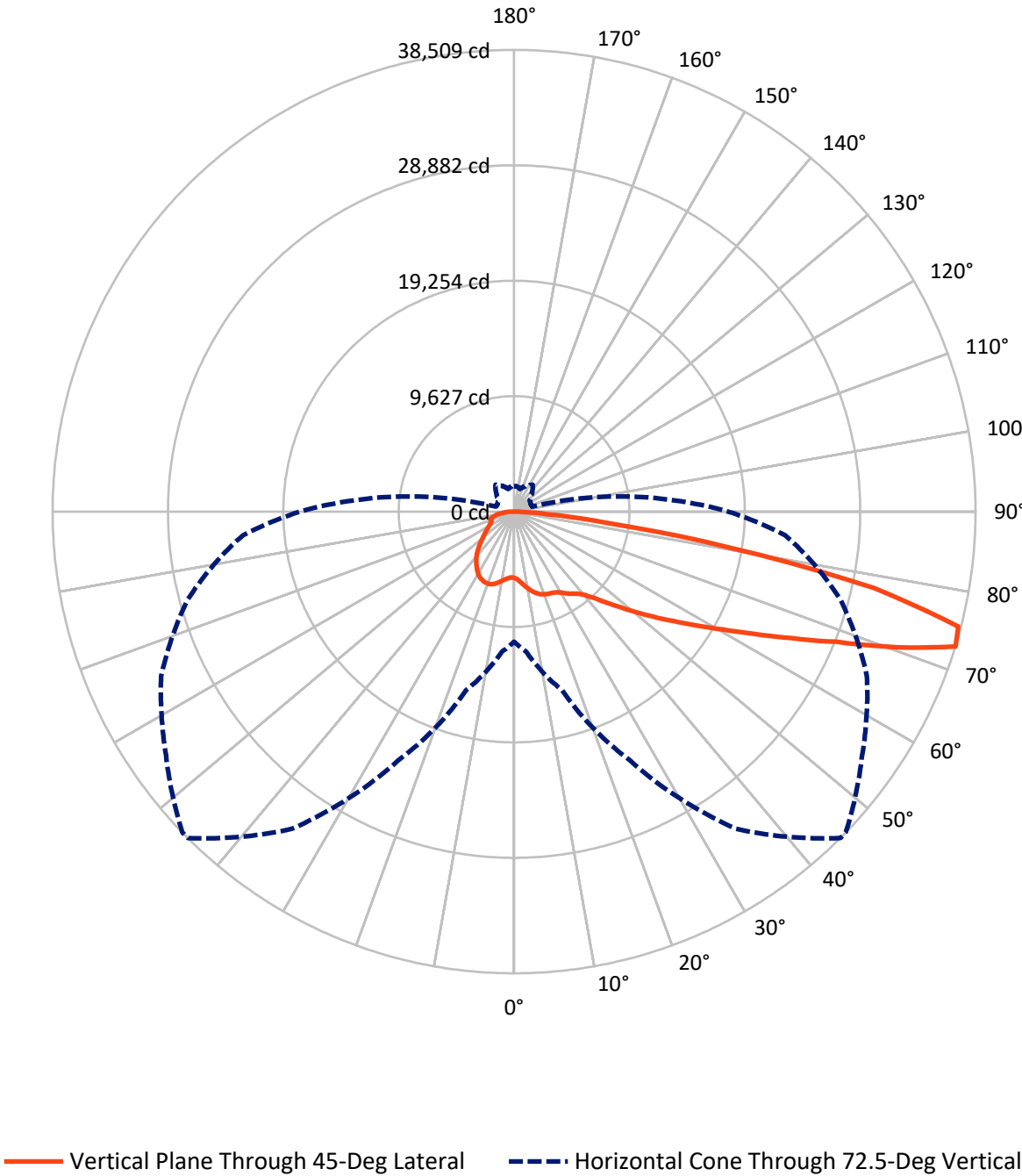
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12409.4	0.0	12409.4
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	42483.5	0.0	42483.5
	% Fixture	77.4	0.0	77.4
Total	Lumens	54892.8	0.0	54892.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	563.6	1.0
10°-20°	1879.2	3.4
20°-30°	3268.9	6.0
30°-40°	4686.2	8.5
40°-50°	6598.5	12.0
50°-60°	10106.9	18.4
60°-70°	14641.3	26.7
70°-80°	11692.0	21.3
80°-90°	1456.2	2.7
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°	54892.8	100.0
0°-180°	54892.8	100.0

Coefficient of Utilization



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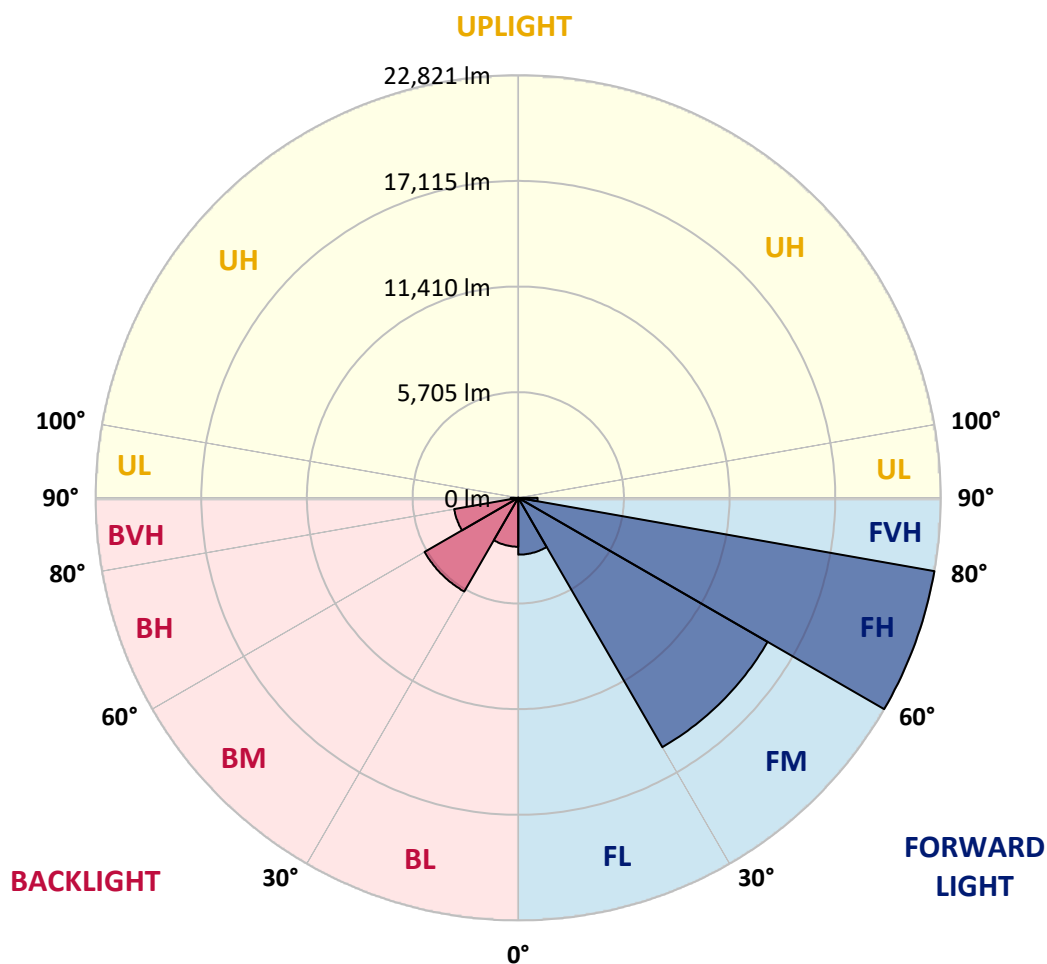
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3069.7	5.6			
FM	(30°-60°)	15548.5	28.3			
FH	(60°-80°)	22820.6	41.6			G5
FVH	(80°-90°)	1044.7	1.9			G5
BL	(0°-30°)	2642.1	4.8	B4/5000		
BM	(30°-60°)	5843.1	10.6	B4/8500		
BH	(60°-80°)	3512.8	6.4	B4/5000		G4/5000
BVH	(80°-90°)	411.5	0.7			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	5537.7	5537.7	5537.7	5537.7	5537.7	5537.7	5537.7	5537.7	5537.7	5537.7	5537.7
2.5°	5754.5	5792.1	5757.4	5725.5	5711.1	5673.6	5670.6	5647.5	5633.1	5592.6	5581.0
5°	6156.5	6205.6	6147.7	6084.2	6026.3	5933.8	5922.2	5855.7	5780.5	5693.8	5644.6
7.5°	6610.4	6653.8	6587.3	6491.8	6390.7	6237.4	6234.6	6113.1	5994.5	5847.0	5763.2
10°	7006.6	7064.4	6974.8	6844.6	6717.4	6543.9	6523.7	6384.9	6234.6	6043.7	5916.4
12.5°	7356.5	7397.0	7310.2	7151.2	7003.7	6830.2	6804.2	6650.9	6483.2	6266.3	6104.4
15°	7634.1	7686.2	7570.4	7399.9	7243.8	7073.1	7050.0	6911.2	6743.5	6515.0	6306.8
17.5°	7816.2	7859.7	7741.1	7550.3	7399.9	7258.2	7240.8	7125.2	6977.7	6746.3	6523.7
20°	7885.7	7932.0	7807.6	7613.9	7475.0	7365.1	7356.5	7272.7	7171.4	6960.4	6734.8
22.5°	7955.1	7998.5	7836.5	7634.1	7512.6	7443.2	7440.4	7385.4	7344.9	7171.4	6951.7
25°	8235.6	8247.2	8030.3	7738.2	7564.7	7504.0	7501.1	7498.2	7515.5	7379.6	7185.9
27.5°	8478.5	8475.6	8290.5	8015.8	7746.8	7619.6	7616.8	7645.7	7700.6	7587.9	7428.8
30°	8834.2	8802.4	8582.6	8296.3	8050.6	7853.9	7836.5	7810.5	7853.9	7764.3	7671.7
32.5°	9588.9	9487.7	9132.0	8623.1	8302.1	8151.7	8128.6	7966.6	7984.0	7929.1	7882.8
35°	10670.4	10537.4	10063.1	9241.9	8614.4	8400.4	8388.8	8183.5	8148.9	8099.7	8117.0
37.5°	11957.2	11792.4	11240.0	10138.4	9152.2	8689.5	8672.2	8487.2	8345.4	8293.4	8391.8
40°	13249.8	13041.6	12584.7	11231.4	9944.6	9172.5	9117.6	8837.0	8675.1	8588.4	8796.6
42.5°	14504.8	14331.3	13940.9	12457.4	10922.0	9878.0	9756.7	9276.6	9155.2	9074.2	9450.1
45°	15615.3	15459.0	15172.8	13767.4	12067.1	10838.1	10719.6	9935.9	9898.3	9898.3	10442.0
47.5°	16517.5	16482.7	16179.1	15103.4	13417.6	11931.2	11725.9	10852.6	10953.8	11110.0	11850.2
50°	17518.0	17422.5	17098.6	16419.1	15005.1	13183.3	13015.6	11977.4	12356.3	12784.2	13886.0
52.5°	18437.5	18489.6	18128.1	17789.8	16797.9	14580.0	14285.0	13304.7	14123.1	14831.5	16271.7
55°	19383.2	19386.0	19284.8	19238.5	18677.6	16124.2	15800.3	14900.9	16202.3	17081.3	19053.4
57.5°	20270.9	20276.7	20427.0	20834.8	20857.9	17905.4	17538.2	16861.6	18512.7	19409.1	21922.1
60°	21063.2	21103.7	21514.3	22468.6	22775.1	19947.0	19599.9	19177.9	20901.3	21803.5	24938.0
62.5°	21329.2	21476.7	22390.5	23746.7	24669.2	22451.2	22110.0	21858.4	23411.3	24249.9	27459.6
65°	20878.1	21216.5	22983.3	24802.1	26618.1	25426.8	25088.4	24813.7	26019.6	26809.0	29530.1
67.5°	19770.6	20207.3	22948.6	25909.7	28983.6	29006.7	28691.5	28046.7	28815.8	29119.5	30203.9
70°	16852.8	17506.4	20927.3	26323.2	31698.9	33902.4	33598.8	31938.9	31606.4	30137.4	28306.9
72.5°	10858.3	11737.5	15410.0	22919.7	32303.3	38508.8	38491.5	35452.3	32488.3	28159.4	22702.8
75°	3961.6	4499.5	7159.8	14386.3	27115.6	38274.6	38387.4	34850.8	29657.4	21751.4	14143.4
77.5°	1443.0	1578.9	2336.5	5529.0	16676.4	30709.9	30944.1	27861.7	21109.5	10916.1	5604.1
80°	757.6	832.8	1197.2	2145.6	7145.4	18238.0	18605.3	16558.0	9921.5	3287.9	1680.1
82.5°	419.3	454.0	670.9	1165.3	3218.5	7798.9	8018.7	6541.0	3490.3	1393.8	694.0
85°	225.6	240.1	315.2	636.2	1573.1	2703.7	2764.4	1954.8	1390.9	818.4	335.5
87.5°	66.5	81.0	104.1	202.4	615.9	607.2	621.8	387.4	549.4	413.5	109.9
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°	5537.7	5537.7	5537.7	5537.7	5537.7	5537.7	5537.7	5537.7	5537.7	5537.7	5537.7
2.5°	5563.6	5555.0	5523.2	5508.7	5491.3	5488.5	5502.9	5505.8	5508.7	5511.6	5523.2
5°	5615.7	5586.8	5557.9	5540.5	5546.3	5549.1	5578.2	5598.3	5612.8	5624.4	5630.1
7.5°	5716.9	5693.8	5644.6	5641.7	5650.4	5676.4	5714.0	5760.3	5786.3	5806.5	5812.4
10°	5867.3	5823.9	5766.0	5774.7	5792.1	5829.7	5907.8	5945.3	5988.8	6026.3	6017.7
12.5°	6020.5	5982.9	5916.4	5922.2	5951.2	6017.7	6092.8	6139.1	6168.0	6196.9	6208.5
15°	6220.1	6153.6	6081.2	6081.2	6133.3	6205.6	6240.3	6277.9	6295.2	6327.0	6338.6
17.5°	6425.4	6338.6	6243.2	6237.4	6301.0	6335.7	6355.9	6361.8	6367.5	6402.3	6413.8
20°	6630.7	6535.3	6399.4	6387.8	6402.3	6396.4	6393.5	6387.8	6396.4	6439.9	6457.2
22.5°	6833.1	6723.2	6535.3	6483.2	6442.7	6387.8	6384.9	6382.0	6387.8	6431.2	6460.1
25°	7070.2	6937.2	6685.7	6529.5	6393.5	6318.4	6327.0	6330.0	6335.7	6370.5	6416.7
27.5°	7327.6	7180.1	6824.4	6515.0	6269.2	6217.1	6202.7	6211.4	6231.6	6286.5	6341.5
30°	7585.0	7411.5	6951.7	6457.2	6113.1	6040.7	5994.5	6014.8	6078.4	6133.3	6194.1
32.5°	7819.2	7645.7	7052.9	6330.0	5913.5	5800.8	5740.0	5766.0	5829.7	5849.9	5922.2
35°	8093.9	7897.2	7096.3	6127.6	5696.6	5523.2	5442.2	5404.6	5436.4	5416.2	5479.8
37.5°	8400.4	8195.1	7090.4	5861.5	5442.2	5242.7	5129.9	4988.2	4921.6	4852.2	4895.7
40°	8854.4	8559.5	7021.0	5540.5	5126.9	4944.8	4742.4	4502.4	4352.0	4216.1	4224.7
42.5°	9473.3	9065.5	6893.8	5187.7	4771.3	4600.7	4326.0	4045.5	3808.4	3582.8	3562.6
45°	10395.7	9727.7	6734.8	4811.8	4386.7	4219.0	3921.1	3606.0	3337.0	3047.8	3013.2
47.5°	11725.9	10618.4	6584.4	4383.8	3981.9	3828.6	3559.7	3267.6	2949.5	2669.0	2637.2
50°	13553.5	11896.5	6445.6	3967.5	3582.8	3467.2	3253.1	2955.3	2634.4	2408.8	2394.3
52.5°	15878.4	13634.4	6387.8	3565.5	3209.8	3166.4	2995.8	2718.2	2414.6	2223.7	2209.3
55°	18547.4	15713.6	6387.8	3180.9	2883.0	2897.5	2779.0	2521.6	2258.4	2087.8	2070.5
57.5°	21271.4	17818.7	6272.1	2825.2	2605.4	2666.1	2591.0	2365.4	2128.3	1951.9	1923.0
60°	23781.4	19582.6	5803.7	2501.3	2359.7	2455.1	2405.9	2212.2	1923.0	1775.5	1752.3
62.5°	25710.2	20577.4	4901.4	2243.9	2157.2	2267.1	2241.1	2009.7	1885.4	1824.7	1804.4
65°	26676.0	20415.4	3747.6	2015.6	1986.6	2157.2	2102.3	2093.6	1995.3	1925.9	1902.7
67.5°	26083.2	19021.6	2718.2	1847.8	1888.3	2056.0	2267.1	2301.8	2119.6	1983.7	1960.6
70°	23483.6	16500.0	2024.2	1688.8	1763.9	2058.9	2585.2	2408.8	2079.1	1920.1	1894.1
72.5°	17864.9	12304.2	1570.2	1521.0	1602.0	2073.4	2726.9	2359.7	1963.5	2122.5	2105.1
75°	10216.4	6755.1	1260.8	1315.7	1399.6	1937.5	2654.5	2232.3	1873.8	1949.0	1949.0
77.5°	3895.1	2596.7	1041.0	1113.4	1124.8	1691.7	2538.9	2223.7	1784.2	1740.8	1587.5
80°	1350.4	1015.0	861.7	884.9	870.4	1503.7	2434.8	1934.6	1460.3	1307.1	1263.7
82.5°	552.3	506.0	682.4	653.5	618.8	1168.3	1966.4	1581.8	1194.2	1055.4	1043.9
85°	240.1	321.0	451.1	396.2	358.5	809.6	1575.9	1338.9	1009.2	870.4	867.6
87.5°	49.2	121.5	190.9	179.3	185.1	540.8	1119.1	951.4	714.2	534.9	419.3
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)