

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: P971546

Luminaire Tested: **NAV-SB6D-827-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P971546
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6D-827-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 55737.4 lumens
Efficiency: N/A
Efficacy: 126.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B5 - 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

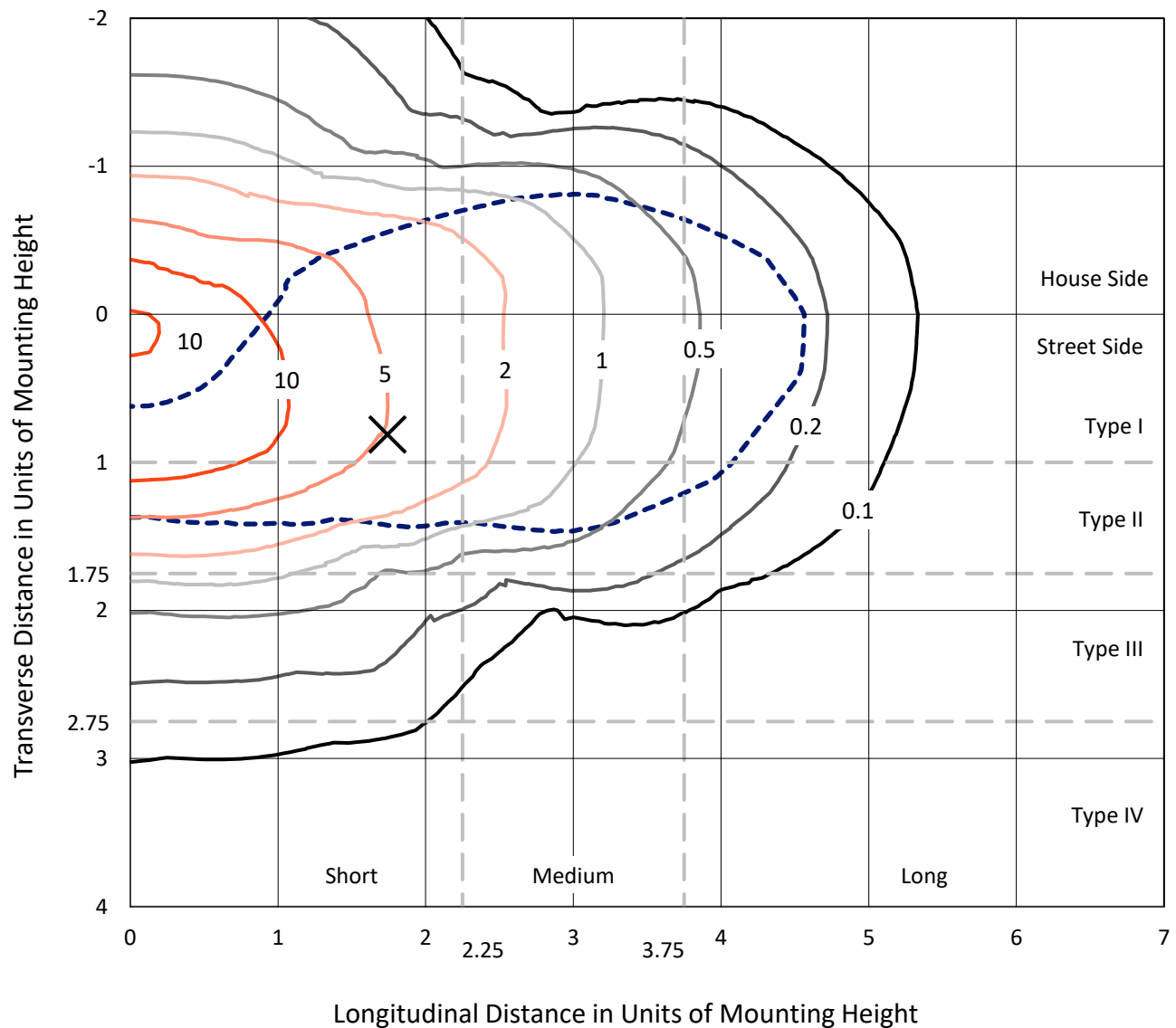


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Iso-Footcandle Lines of Horizontal Illumination

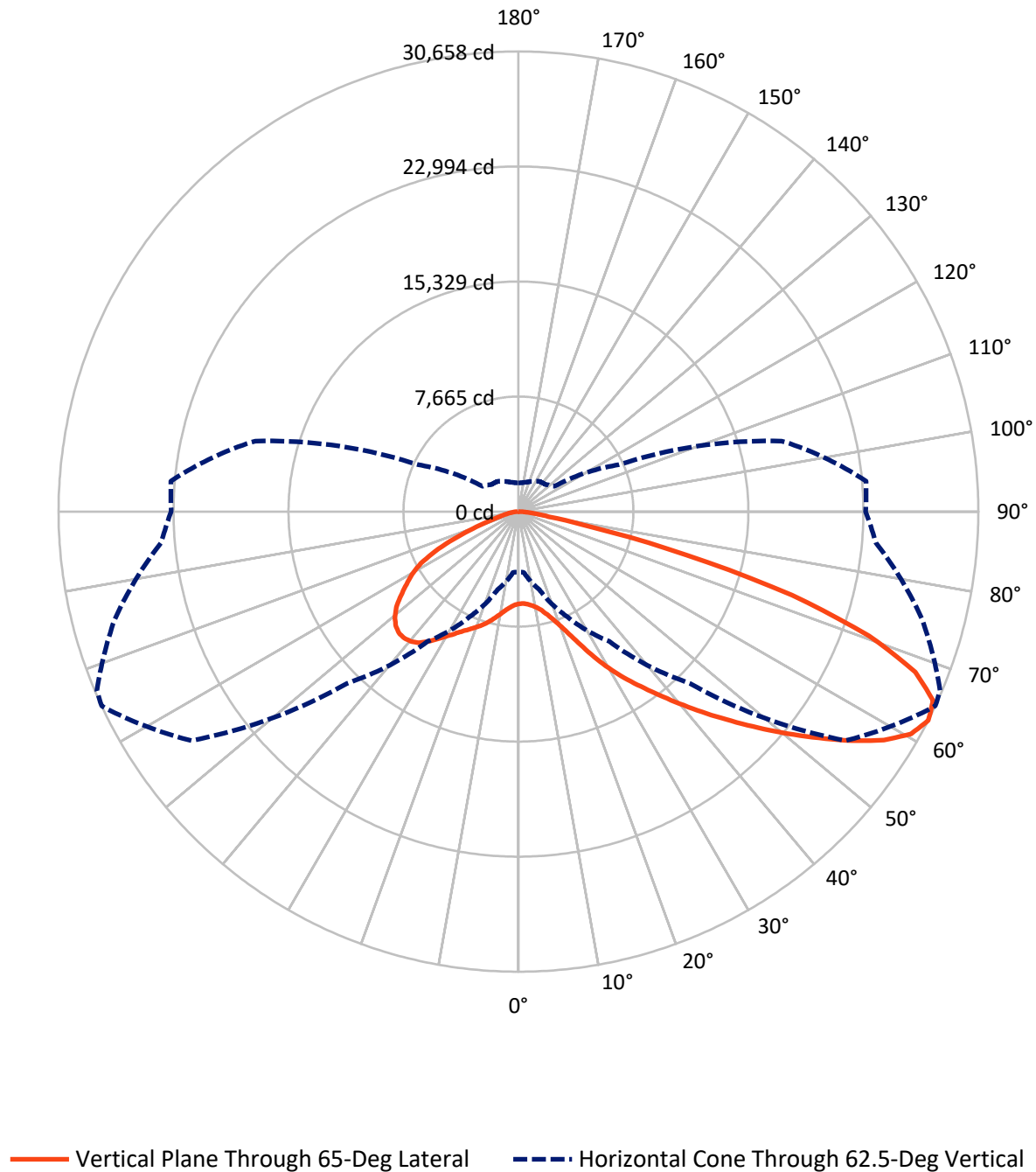
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.6 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	17588.3	0.0	17588.3
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	38149.1	0.0	38149.1
	% Fixture	68.4	0.0	68.4
Total	Lumens	55737.4	0.0	55737.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	612.4	1.1
10°-20°	2076.5	3.7
20°-30°	4210.4	7.6
30°-40°	7286.0	13.1
40°-50°	11026.0	19.8
50°-60°	12927.3	23.2
60°-70°	10838.0	19.4
70°-80°	5983.5	10.7
80°-90°	777.2	1.4
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°	55737.4	100.0
0°-180°	55737.4	100.0

Coefficient of Utilization



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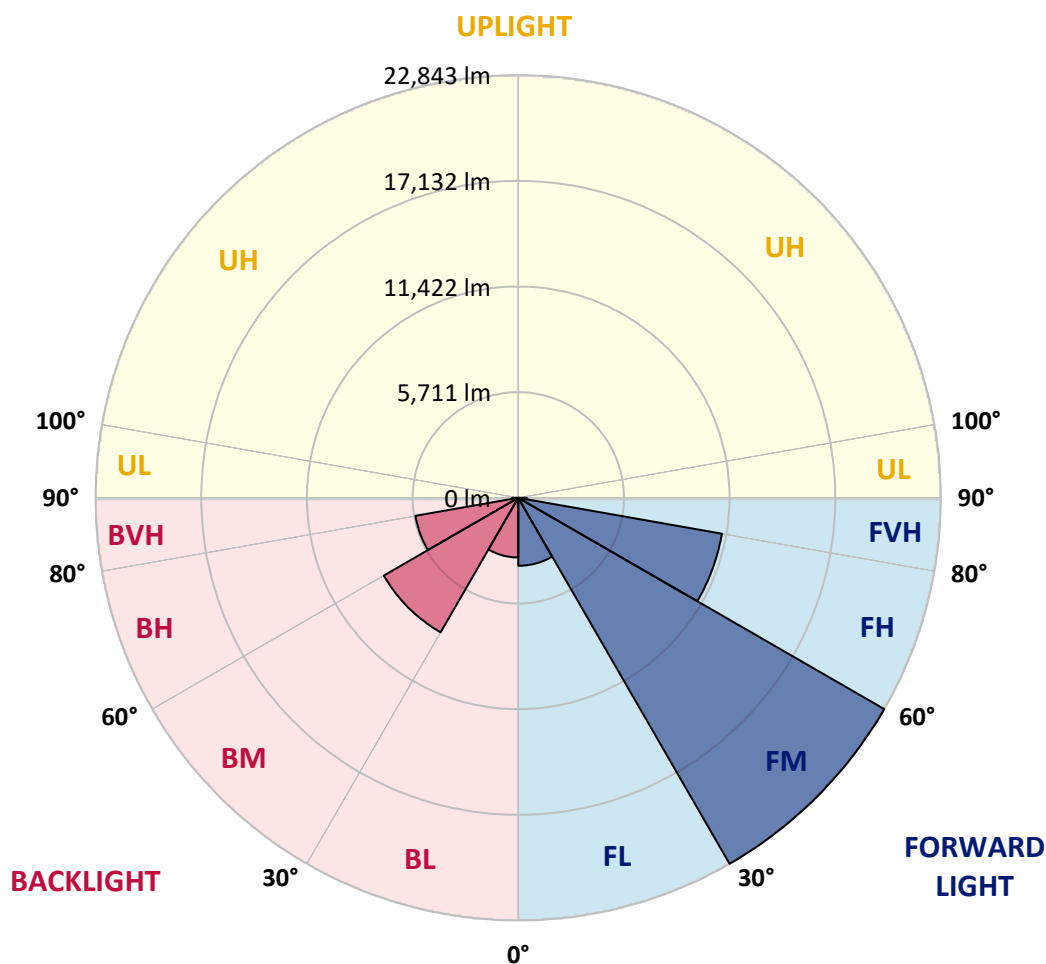
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3673.8	6.6			
FM	(30°-60°)	22843.0	41.0			
FH	(60°-80°)	11179.3	20.1			G4/12000
FVH	(80°-90°)	453.0	0.8			G3/500
BL	(0°-30°)	3225.5	5.8	B4/5000		
BM	(30°-60°)	8396.4	15.1	B4/8500		
BH	(60°-80°)	5642.2	10.1	B5		G5
BVH	(80°-90°)	324.2	0.6			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	6142.0	6142.0	6142.0	6142.0	6142.0	6142.0	6142.0	6142.0	6142.0	6142.0	6142.0
2.5°	6101.5	6084.2	6098.6	6098.6	6104.4	6101.5	6121.8	6127.6	6136.3	6153.6	6153.6
5°	6040.8	6038.0	6063.9	6087.1	6110.2	6130.4	6156.5	6194.1	6199.8	6220.1	6246.1
7.5°	6020.5	6003.2	6043.7	6072.6	6127.6	6176.8	6246.1	6309.7	6335.7	6344.4	6393.6
10°	6176.8	6147.8	6185.4	6202.8	6249.0	6298.2	6379.2	6480.4	6509.3	6544.0	6599.0
12.5°	6442.7	6411.0	6465.9	6491.9	6535.3	6578.7	6633.6	6731.9	6746.3	6810.0	6862.1
15°	6807.1	6769.5	6804.3	6836.0	6908.3	6948.8	7003.7	7099.2	7099.2	7148.4	7186.0
17.5°	7301.6	7252.5	7278.4	7290.0	7336.3	7397.0	7489.6	7573.4	7616.8	7599.5	7547.4
20°	8039.0	7978.3	7978.3	7920.5	7903.1	7952.3	8073.7	8189.3	8235.7	8146.0	8018.8
22.5°	9146.5	9059.8	9010.6	8814.0	8735.9	8741.7	8863.2	9004.8	9042.4	8883.4	8597.1
25°	10554.8	10418.9	10352.4	10063.2	9886.8	9733.5	9828.9	10011.2	10063.2	9866.5	9403.9
27.5°	11963.1	11971.8	11908.1	11561.1	11269.1	10988.5	10939.4	11130.3	11185.2	10962.6	10390.0
30°	13938.2	13732.8	13611.4	13194.9	12778.6	12385.3	12182.8	12260.9	12275.4	12009.3	11344.3
32.5°	15641.3	15589.3	15329.1	14964.7	14429.7	13813.8	13475.5	13351.1	13328.0	12949.1	12159.7
35°	17581.7	17552.8	17278.0	16844.3	16265.9	15410.1	14799.9	14444.2	14415.3	13883.2	12966.5
37.5°	19553.8	19553.8	19285.0	18810.7	18212.1	17142.1	16213.9	15650.0	15557.4	14863.4	13787.8
40°	21127.0	21031.6	21080.7	20881.2	20195.8	19059.4	17784.2	16965.8	16841.4	16008.6	14661.1
42.5°	22020.5	21988.7	22283.6	22506.3	22225.8	21317.8	19513.3	18391.4	18217.8	17269.4	15667.3
45°	22220.1	22185.3	22711.6	23527.0	23920.3	23547.3	21393.0	19892.2	19681.1	18588.0	16745.9
47.5°	21760.2	21690.8	22462.9	23749.8	25010.5	25666.9	23428.7	21520.2	21213.7	19872.0	17853.6
50°	20378.0	20311.5	21479.7	23188.8	25377.8	27107.0	25638.0	23246.6	22778.2	21248.4	18972.6
52.5°	17373.4	17405.3	19235.8	21583.8	24894.9	28003.5	27540.8	25065.5	24501.6	22656.7	20022.4
55°	13533.3	13602.7	15852.4	18437.6	22963.2	27867.6	28839.2	26939.4	26378.3	23981.1	21106.7
57.5°	9690.1	9996.7	12104.7	14664.0	19253.1	25713.3	29122.6	28720.6	28176.9	25427.0	22168.0
60°	6280.8	6335.7	8504.5	11083.9	14661.1	21884.6	28547.1	30071.0	29646.0	26901.7	23055.7
62.5°	4025.3	4062.9	5384.4	7752.7	10551.9	16190.8	26609.6	30658.1	30528.0	27876.2	23908.7
65°	2958.3	2929.3	3617.5	5124.2	7107.9	9985.1	22847.6	30374.6	30632.0	28486.4	24614.4
67.5°	2469.5	2429.0	2767.4	3548.1	5236.9	5670.7	16905.0	28532.6	29475.3	28417.0	25132.0
70°	2249.8	2215.0	2420.3	2634.4	4086.0	3796.8	8522.0	24805.2	26256.9	27627.5	25048.1
72.5°	1905.7	1844.9	2125.4	2339.4	3178.0	2911.9	3522.1	19053.6	20823.3	25097.3	23868.3
75°	1477.6	1437.2	1677.2	2058.9	2388.6	2272.9	2226.6	11569.8	13501.5	19409.3	20881.2
77.5°	1171.2	1116.2	1336.0	1604.9	2148.5	1714.8	1622.3	4982.4	6896.8	12391.0	15624.0
80°	882.0	832.8	1015.0	1269.5	1651.2	1292.6	1049.7	2032.9	2599.7	6277.9	7856.8
82.5°	627.5	584.1	708.5	931.1	1110.4	1159.6	644.8	1139.4	1281.0	2420.3	1755.3
85°	401.9	376.0	474.3	584.1	705.6	746.1	393.3	595.7	653.5	997.6	731.6
87.5°	219.8	179.3	254.5	271.8	326.8	297.9	188.0	216.9	234.2	361.4	309.4
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°	6142.0	6142.0	6142.0	6142.0	6142.0	6142.0	6142.0	6142.0	6142.0	6142.0	6142.0
2.5°	6165.2	6173.9	6202.8	6211.4	6231.7	6257.7	6275.0	6292.4	6292.4	6309.7	6309.7
5°	6249.0	6269.3	6330.0	6361.8	6413.8	6465.9	6497.7	6535.3	6558.5	6570.0	6575.8
7.5°	6411.0	6442.7	6529.6	6584.5	6674.1	6746.3	6795.5	6847.6	6859.2	6891.0	6879.4
10°	6630.7	6668.3	6766.6	6870.8	6977.7	7067.4	7113.6	7151.2	7165.7	7171.5	7157.1
12.5°	6882.3	6937.2	7064.5	7191.7	7304.5	7382.6	7394.1	7385.4	7344.9	7310.3	7310.3
15°	7191.7	7240.9	7382.6	7521.3	7631.2	7645.7	7573.4	7527.2	7478.0	7469.3	7469.3
17.5°	7561.8	7587.9	7718.0	7854.0	7862.6	7813.5	7706.5	7663.1	7616.8	7585.0	7587.9
20°	7992.7	7984.0	8076.6	8134.4	8073.7	7923.4	7761.4	7689.1	7642.8	7605.2	7608.2
22.5°	8507.5	8441.0	8429.4	8414.9	8253.0	7937.8	7718.0	7625.5	7553.2	7501.2	7518.5
25°	9256.4	9002.0	8825.6	8727.3	8362.9	7859.7	7579.3	7373.8	7238.0	7148.4	7183.1
27.5°	10193.3	9765.4	9320.0	9080.1	8362.9	7700.6	7243.8	6911.3	6688.5	6596.0	6642.3
30°	11086.9	10638.7	9982.3	9505.1	8342.6	7440.4	6703.0	6240.3	5980.1	5887.6	5942.5
32.5°	11850.3	11361.6	10684.9	9970.7	8293.5	7018.2	6032.1	5520.3	5268.7	5158.8	5213.8
35°	12558.8	12038.2	11390.5	10482.5	8163.3	6399.4	5294.7	4904.3	4623.9	4447.5	4505.3
37.5°	13284.6	12665.7	12058.5	10945.2	7929.1	5676.4	4728.0	4395.4	4065.8	3828.7	3892.2
40°	14074.1	13333.7	12772.7	11219.9	7544.5	4988.3	4288.4	3984.8	3634.9	3383.3	3432.5
42.5°	14996.5	14134.7	13568.0	11361.6	7018.2	4499.5	4002.1	3704.3	3374.6	3169.3	3209.8
45°	15959.5	15016.8	14293.8	11358.7	6431.2	4271.1	3909.7	3614.7	3250.3	3036.4	3071.0
47.5°	16968.7	15939.2	14921.3	11173.6	5922.2	4302.8	3857.6	3420.9	3018.9	2810.8	2839.7
50°	17980.8	16948.4	15528.5	10826.7	5705.4	4233.5	3663.9	3149.1	2674.8	2486.9	2498.4
52.5°	18984.2	18021.2	16052.0	10332.1	5485.6	3976.1	3415.1	2796.3	2533.2	2403.0	2403.0
55°	19993.3	19082.5	16621.6	9612.1	4936.2	3675.3	2998.7	2663.3	2420.3	2301.8	2290.3
57.5°	21005.5	20308.6	17162.4	8892.1	4245.0	3305.2	2770.3	2501.3	2307.6	2206.4	2189.0
60°	22058.1	21711.0	17720.5	8229.8	3562.6	2831.0	2602.6	2371.2	2174.5	2061.8	2053.1
62.5°	23142.4	23255.3	18157.2	7376.8	2935.1	2541.8	2452.2	2215.0	2024.2	1917.3	1914.3
65°	24235.5	24744.5	18443.4	6194.1	2379.8	2267.1	2290.3	2044.5	1850.7	1758.2	1755.3
67.5°	25059.7	25817.3	18362.5	4687.5	1951.9	2006.8	2087.8	1865.2	1682.9	1610.7	1613.6
70°	25152.3	25690.1	17564.3	3209.8	1633.8	1752.3	1862.3	1688.8	1500.8	1448.7	1451.6
72.5°	23920.3	23955.1	15340.6	2096.5	1382.2	1538.4	1625.1	1509.5	1327.3	1275.2	1272.3
75°	20690.3	19811.2	11263.3	1382.2	1156.7	1321.5	1402.5	1321.5	1145.1	1156.7	1116.2
77.5°	15676.0	14030.6	6838.9	983.2	965.9	1110.4	1220.3	1162.5	1012.1	1136.4	1000.5
80°	8076.6	7590.7	3050.8	734.5	763.4	887.8	1003.5	928.2	801.0	763.4	696.9
82.5°	1850.7	2151.5	1202.9	526.3	552.3	639.1	766.3	696.9	575.4	485.8	480.0
85°	647.7	708.5	532.1	329.6	323.9	399.0	520.5	465.6	390.4	312.3	329.6
87.5°	205.3	269.0	199.6	133.0	138.8	179.3	240.1	219.8	182.1	118.6	124.3
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)