

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: P969469

Luminaire Tested: **NAV-SB5D-830-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969469
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-SB5D-830-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 47978.2 lumens
Efficiency: N/A
Efficacy: 131.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

Input Watts (W): 364.9
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

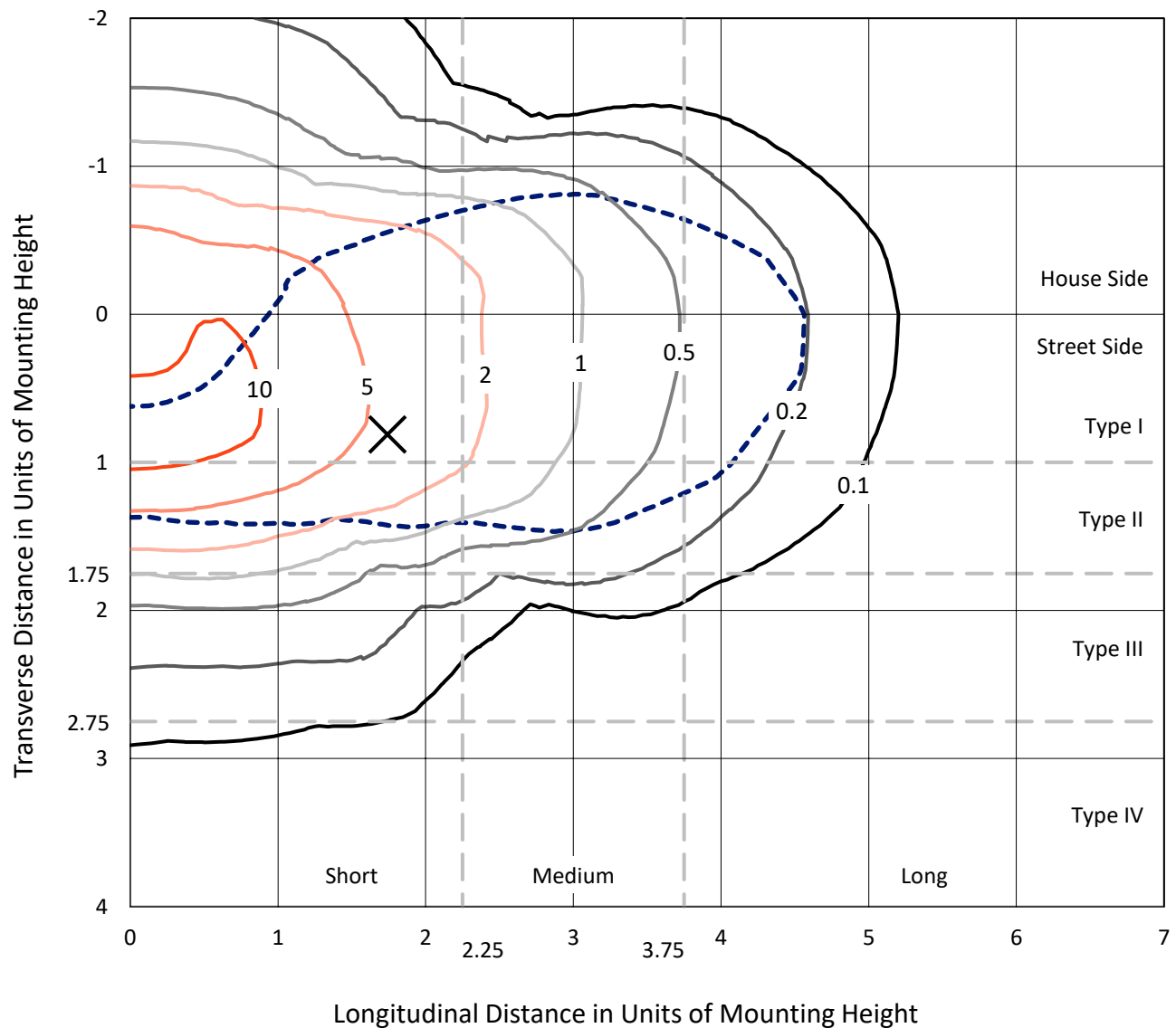


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd



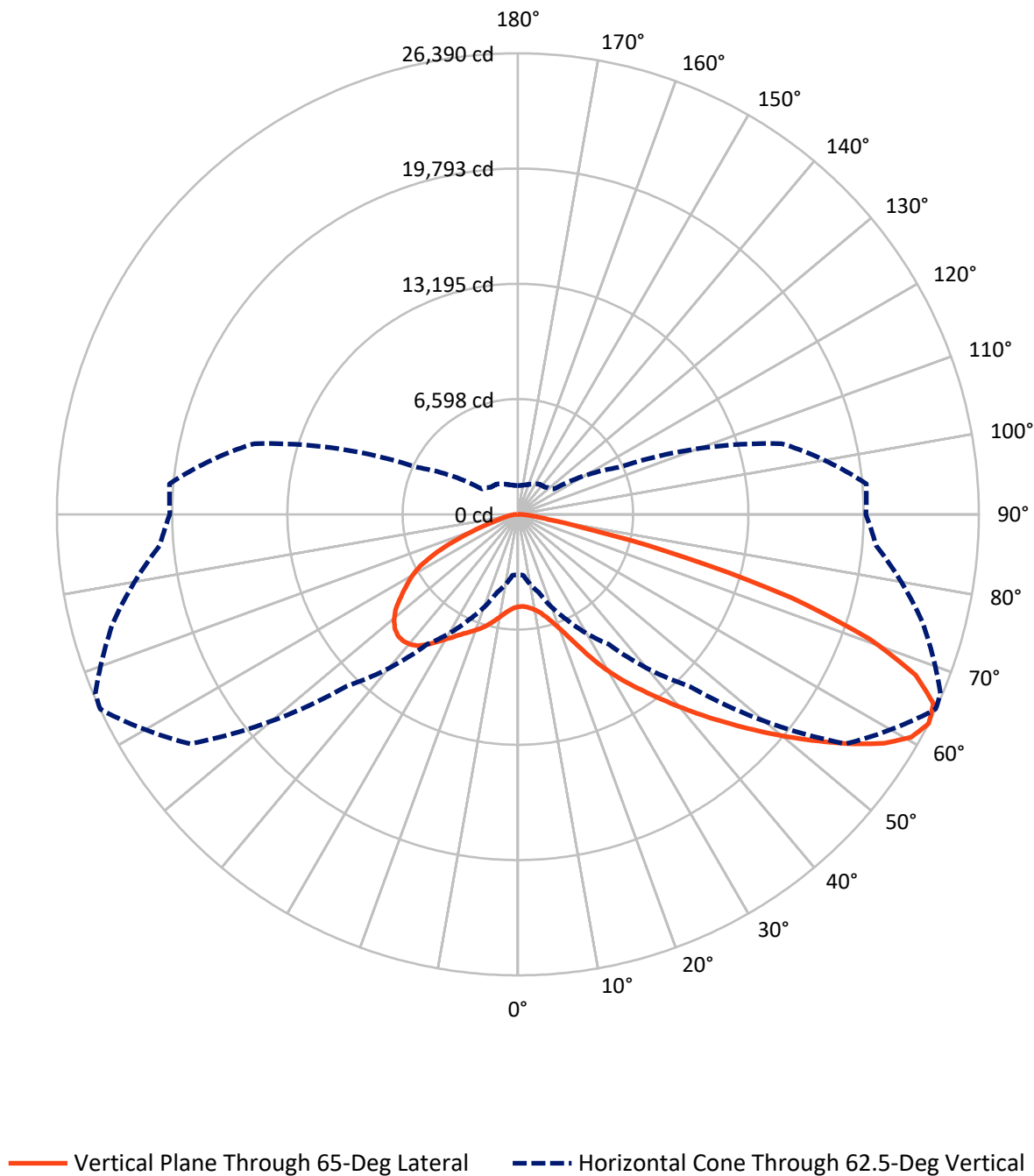
Based on 25 foot mounting height. Maximum calculated value = 13.4 fc

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	15139.8	0.0	15139.8
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	32838.4	0.0	32838.4
	% Fixture	68.4	0.0	68.4
Total	Lumens	47978.2	0.0	47978.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	527.1	1.1
10°-20°	1787.5	3.7
20°-30°	3624.3	7.6
30°-40°	6271.8	13.1
40°-50°	9491.1	19.8
50°-60°	11127.7	23.2
60°-70°	9329.2	19.4
70°-80°	5150.5	10.7
80°-90°	669.0	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°	47978.2	100.0
0°-180°	47978.2	100.0

Coefficient of Utilization



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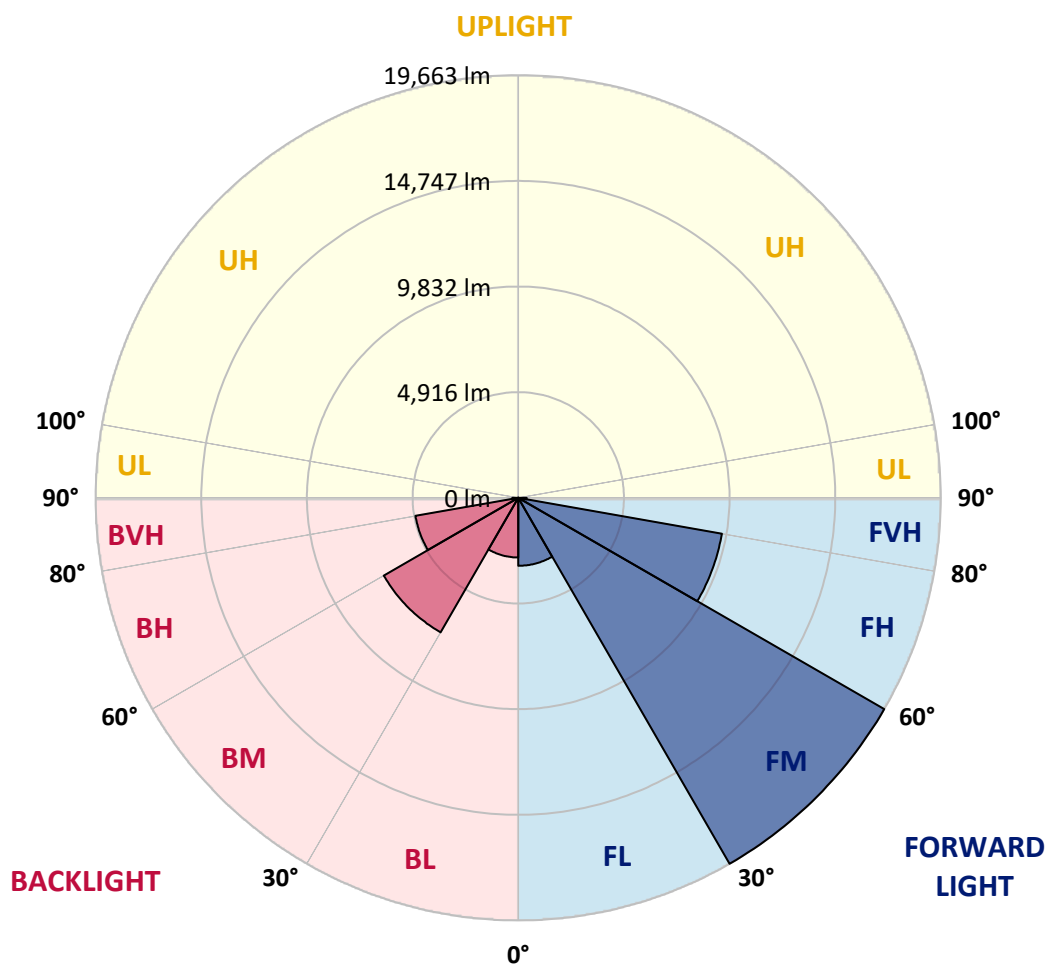
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3162.4	6.6			
FM	(30°-60°)	19663.0	41.0			
FH	(60°-80°)	9623.0	20.1			G4/12000
FVH	(80°-90°)	389.9	0.8			G3/500
BL	(0°-30°)	2776.5	5.8	B4/5000		
BM	(30°-60°)	7227.5	15.1	B4/8500		
BH	(60°-80°)	4856.7	10.1	B4/5000		G4/5000
BVH	(80°-90°)	279.1	0.6			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	5287.0	5287.0	5287.0	5287.0	5287.0	5287.0	5287.0	5287.0	5287.0	5287.0	5287.0
2.5°	5252.1	5237.2	5249.6	5249.6	5254.7	5252.1	5269.5	5274.5	5282.0	5297.0	5297.0
5°	5199.8	5197.4	5219.8	5239.7	5259.6	5277.0	5299.5	5331.8	5336.8	5354.2	5376.6
7.5°	5182.4	5167.5	5202.4	5227.3	5274.5	5316.9	5376.6	5431.4	5453.7	5461.2	5503.5
10°	5316.9	5292.0	5324.4	5339.2	5379.1	5421.4	5491.1	5578.3	5603.2	5633.0	5680.2
12.5°	5545.9	5518.5	5565.7	5588.2	5625.5	5662.8	5710.2	5794.7	5807.2	5862.0	5906.8
15°	5859.5	5827.1	5857.1	5884.4	5946.6	5981.5	6028.7	6110.9	6110.9	6153.2	6185.6
17.5°	6285.1	6242.9	6265.2	6275.2	6315.0	6367.3	6446.9	6519.1	6556.5	6541.5	6496.8
20°	6919.9	6867.6	6867.6	6817.8	6802.9	6845.3	6949.7	7049.3	7089.1	7012.0	6902.5
22.5°	7873.2	7798.5	7756.3	7586.9	7519.8	7524.7	7629.3	7751.3	7783.6	7646.7	7400.3
25°	9085.5	8968.4	8911.2	8662.3	8510.5	8378.6	8460.7	8617.5	8662.3	8493.0	8094.7
27.5°	10297.7	10305.1	10250.4	9951.7	9700.3	9458.8	9416.5	9580.8	9628.1	9436.5	8943.5
30°	11997.8	11821.0	11716.5	11358.0	10999.6	10661.1	10486.9	10554.0	10566.5	10337.5	9765.0
32.5°	13463.9	13419.1	13195.0	12881.5	12420.9	11890.7	11599.5	11492.5	11472.5	11146.5	10467.0
35°	15134.1	15109.2	14872.7	14499.4	14001.6	13264.7	12739.5	12433.4	12408.4	11950.5	11161.4
37.5°	16831.7	16831.7	16600.3	16192.0	15676.8	14755.8	13956.7	13471.4	13391.7	12794.4	11868.4
40°	18185.9	18103.8	18146.0	17974.3	17384.3	16406.0	15308.4	14603.9	14496.9	13780.0	12620.1
42.5°	18955.0	18927.6	19181.5	19373.2	19131.7	18350.2	16796.9	15831.1	15681.8	14865.3	13486.3
45°	19126.7	19096.9	19549.9	20251.8	20590.4	20269.3	18414.8	17122.9	16941.3	16000.4	14414.8
47.5°	18731.0	18671.2	19335.8	20443.5	21528.8	22093.9	20167.2	18524.4	18260.5	17105.5	15368.1
50°	17541.1	17483.9	18489.6	19960.6	21844.9	23333.4	22069.0	20010.5	19607.1	18290.4	16331.4
52.5°	14955.0	14982.3	16558.0	18579.1	21429.3	24105.1	23706.8	21576.0	21090.7	19502.6	17235.0
55°	11649.3	11709.1	13645.6	15870.9	19766.5	23988.1	24824.5	23189.1	22706.2	20642.7	18168.4
57.5°	8341.2	8605.1	10419.6	12622.6	16572.9	22133.6	25068.4	24722.4	24254.5	21887.2	19081.9
60°	5406.5	5453.7	7320.7	9541.0	12620.1	18838.0	24573.0	25884.8	25518.9	23156.7	19846.2
62.5°	3464.9	3497.3	4634.8	6673.5	9082.9	13936.8	22905.3	26390.2	26278.1	23995.6	20580.5
65°	2546.4	2521.5	3114.0	4410.8	6118.3	8595.1	19666.9	26146.2	26367.7	24520.8	21187.8
67.5°	2125.7	2090.9	2382.1	3054.2	4507.8	4881.3	14551.6	24560.6	25372.0	24461.0	21633.3
70°	1936.5	1906.7	2083.4	2267.6	3517.2	3268.3	7335.6	21352.1	22601.7	23781.5	21561.2
72.5°	1640.4	1588.1	1829.5	2013.7	2735.6	2506.6	3031.8	16401.1	17924.5	21603.5	20545.6
75°	1271.9	1237.1	1443.7	1772.3	2056.0	1956.5	1916.6	9959.1	11622.0	16707.3	17974.3
77.5°	1008.1	960.8	1149.9	1381.5	1849.4	1476.1	1396.5	4288.8	5936.7	10666.0	13448.9
80°	759.2	716.9	873.7	1092.8	1421.3	1112.6	903.5	1749.9	2237.8	5404.0	6763.1
82.5°	540.2	502.8	609.9	801.6	955.8	998.1	555.0	980.7	1102.7	2083.4	1511.0
85°	346.0	323.6	408.3	502.8	607.3	642.2	338.6	512.8	562.5	858.7	629.8
87.5°	189.2	154.4	219.0	234.0	281.3	256.4	161.7	186.7	201.6	311.2	266.3
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°	5287.0	5287.0	5287.0	5287.0	5287.0	5287.0	5287.0	5287.0	5287.0	5287.0	5287.0
2.5°	5306.9	5314.4	5339.2	5346.7	5364.1	5386.6	5401.4	5416.4	5416.4	5431.4	5431.4
5°	5379.1	5396.5	5448.8	5476.2	5521.0	5565.7	5593.1	5625.5	5645.4	5655.3	5660.4
7.5°	5518.5	5545.9	5620.6	5667.8	5745.0	5807.2	5849.6	5894.4	5904.3	5931.7	5921.7
10°	5707.6	5740.0	5824.7	5914.2	6006.4	6083.5	6123.3	6155.7	6168.1	6173.2	6160.7
12.5°	5924.2	5971.5	6081.0	6190.6	6287.7	6354.8	6364.8	6357.4	6322.5	6292.6	6292.6
15°	6190.6	6232.9	6354.8	6474.3	6568.9	6581.3	6519.1	6479.3	6437.0	6429.5	6429.5
17.5°	6509.2	6531.6	6643.5	6760.6	6768.1	6725.7	6633.6	6596.3	6556.5	6529.0	6531.6
20°	6880.0	6872.6	6952.3	7002.0	6949.7	6820.4	6681.0	6618.7	6578.9	6546.5	6549.0
22.5°	7323.1	7265.9	7255.9	7243.5	7104.1	6832.8	6643.5	6563.9	6501.7	6456.9	6471.8
25°	7967.8	7748.8	7596.9	7512.3	7198.7	6765.5	6524.1	6347.4	6230.4	6153.2	6183.1
27.5°	8774.3	8405.9	8022.6	7815.9	7198.7	6628.7	6235.4	5949.1	5757.4	5677.8	5717.7
30°	9543.5	9157.7	8592.6	8181.9	7181.3	6404.6	5769.9	5371.6	5147.5	5067.9	5115.3
32.5°	10200.6	9779.9	9197.4	8582.6	7138.9	6041.2	5192.4	4751.8	4535.2	4440.7	4488.0
35°	10810.5	10362.4	9804.8	9023.2	7026.9	5508.6	4557.7	4221.7	3980.2	3828.4	3878.1
37.5°	11435.2	10902.5	10379.9	9421.5	6825.3	4886.3	4069.8	3783.6	3499.8	3295.7	3350.4
40°	12114.8	11477.5	10994.7	9658.0	6494.2	4293.8	3691.4	3430.1	3128.9	2912.3	2954.7
42.5°	12908.8	12167.1	11679.2	9779.9	6041.2	3873.2	3445.0	3188.7	2904.8	2728.1	2763.0
45°	13737.7	12926.3	12304.0	9777.5	5535.9	3676.5	3365.4	3111.5	2797.8	2613.6	2643.5
47.5°	14606.5	13720.2	12844.1	9618.2	5097.8	3703.8	3320.6	2944.7	2598.7	2419.5	2444.3
50°	15477.6	14589.0	13366.8	9319.4	4911.1	3644.2	3153.8	2710.7	2302.5	2140.7	2150.7
52.5°	16341.4	15512.5	13817.4	8893.8	4722.0	3422.6	2939.7	2407.0	2180.5	2068.4	2068.4
55°	17210.1	16426.0	14307.8	8274.0	4249.0	3163.8	2581.3	2292.5	2083.4	1981.4	1971.4
57.5°	18081.3	17481.4	14773.2	7654.2	3654.1	2845.1	2384.7	2153.1	1986.3	1899.2	1884.3
60°	18987.4	18688.6	15253.6	7084.2	3066.7	2436.9	2240.2	2041.1	1871.9	1774.8	1767.3
62.5°	19920.8	20017.8	15629.5	6349.9	2526.5	2188.0	2110.8	1906.7	1742.4	1650.4	1647.8
65°	20861.7	21299.8	15875.9	5331.8	2048.6	1951.5	1971.4	1759.8	1593.1	1513.4	1511.0
67.5°	21571.1	22223.2	15806.2	4034.9	1680.2	1727.4	1797.1	1605.6	1448.7	1386.4	1389.0
70°	21650.8	22113.8	15119.2	2763.0	1406.4	1508.4	1603.0	1453.7	1291.9	1247.1	1249.6
72.5°	20590.4	20620.2	13205.1	1804.6	1189.8	1324.2	1398.9	1299.4	1142.6	1097.7	1095.2
75°	17810.0	17053.2	9695.3	1189.8	995.7	1137.5	1207.2	1137.5	985.7	995.7	960.8
77.5°	13493.8	12077.5	5886.9	846.3	831.4	955.8	1050.4	1000.6	871.2	978.3	861.2
80°	6952.3	6534.1	2626.0	632.2	657.1	764.1	863.8	799.0	689.5	657.1	599.9
82.5°	1593.1	1852.0	1035.5	453.0	475.4	550.1	659.6	599.9	495.4	418.2	413.2
85°	557.6	609.9	458.0	283.7	278.8	343.5	448.0	400.8	336.0	268.9	283.7
87.5°	176.7	231.4	171.8	114.5	119.5	154.4	206.6	189.2	156.8	102.1	107.0
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)