

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: P969350

Luminaire Tested: **NAV-SB5D-740-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969350
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-740-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 55780.5 lumens
Efficiency: N/A
Efficacy: 152.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

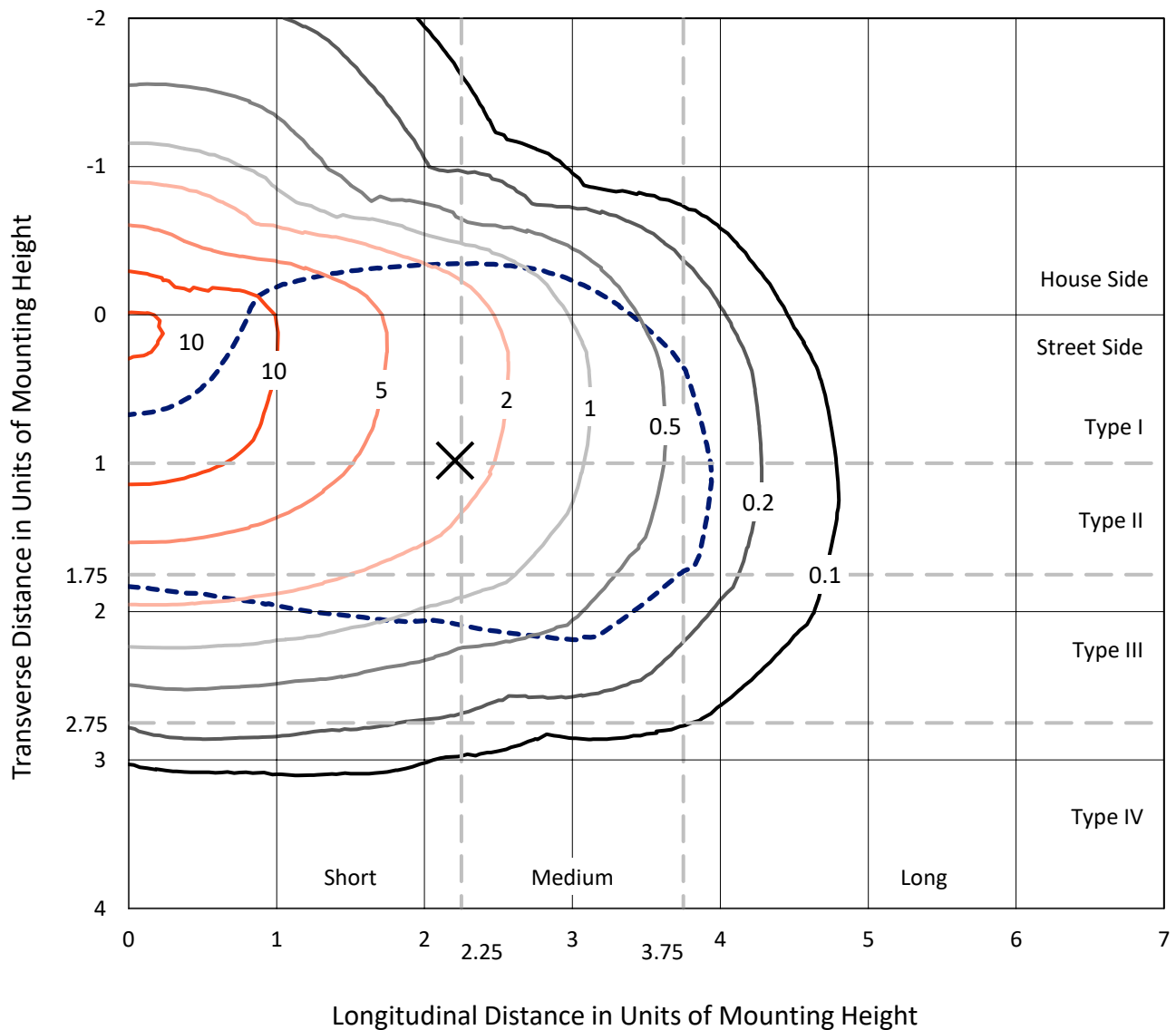
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

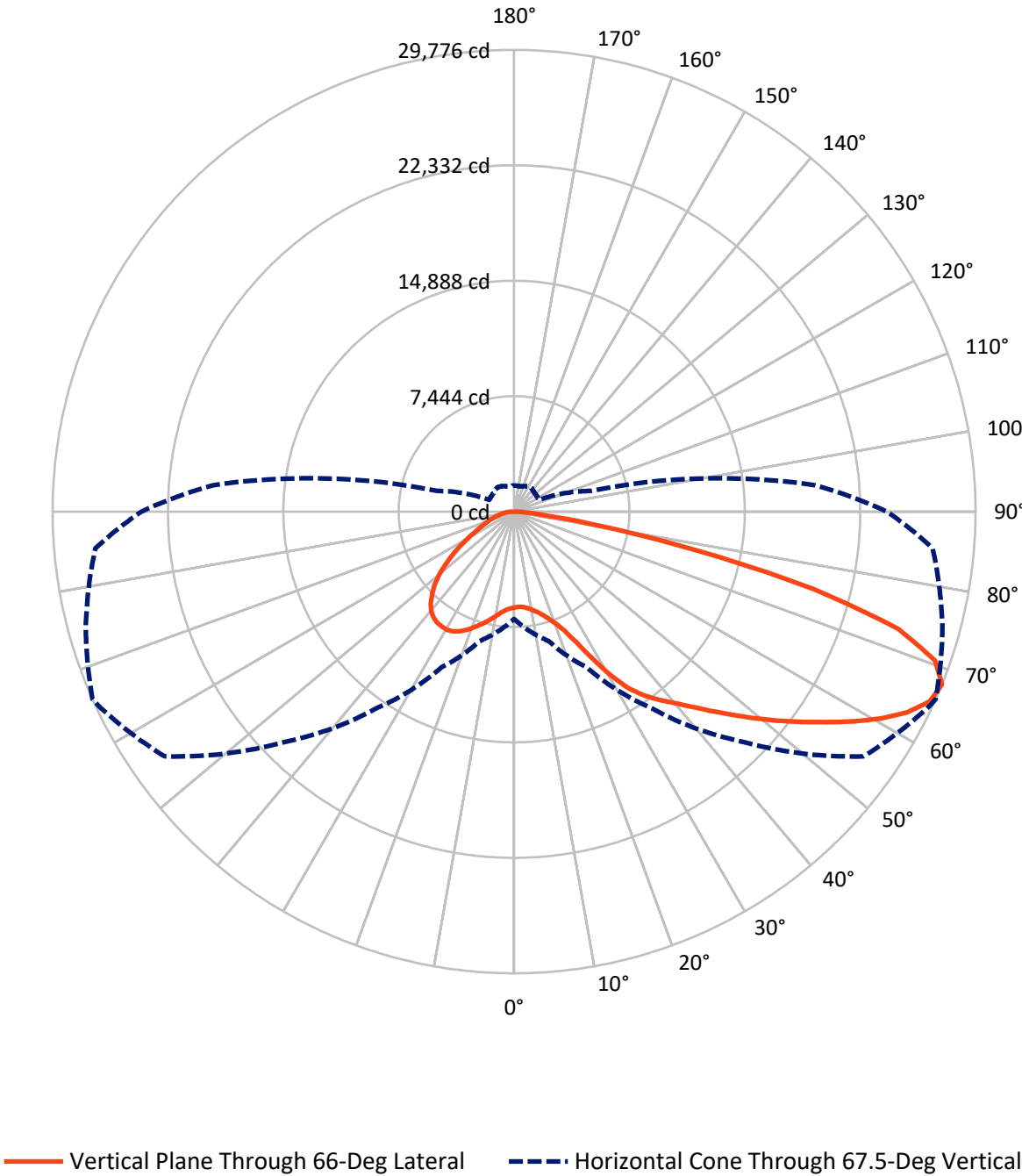
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13869.7	0.0	13869.7
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	41910.8	0.0	41910.8
	% Fixture	75.1	0.0	75.1
Total	Lumens	55780.5	0.0	55780.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	613.4	1.1
10°-20°	2026.6	3.6
20°-30°	3906.1	7.0
30°-40°	6848.9	12.3
40°-50°	10182.0	18.3
50°-60°	12906.7	23.1
60°-70°	12628.9	22.6
70°-80°	6024.1	10.8
80°-90°	643.8	1.2
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°	55780.5	100.0
0°-180°	55780.5	100.0

Coefficient of Utilization



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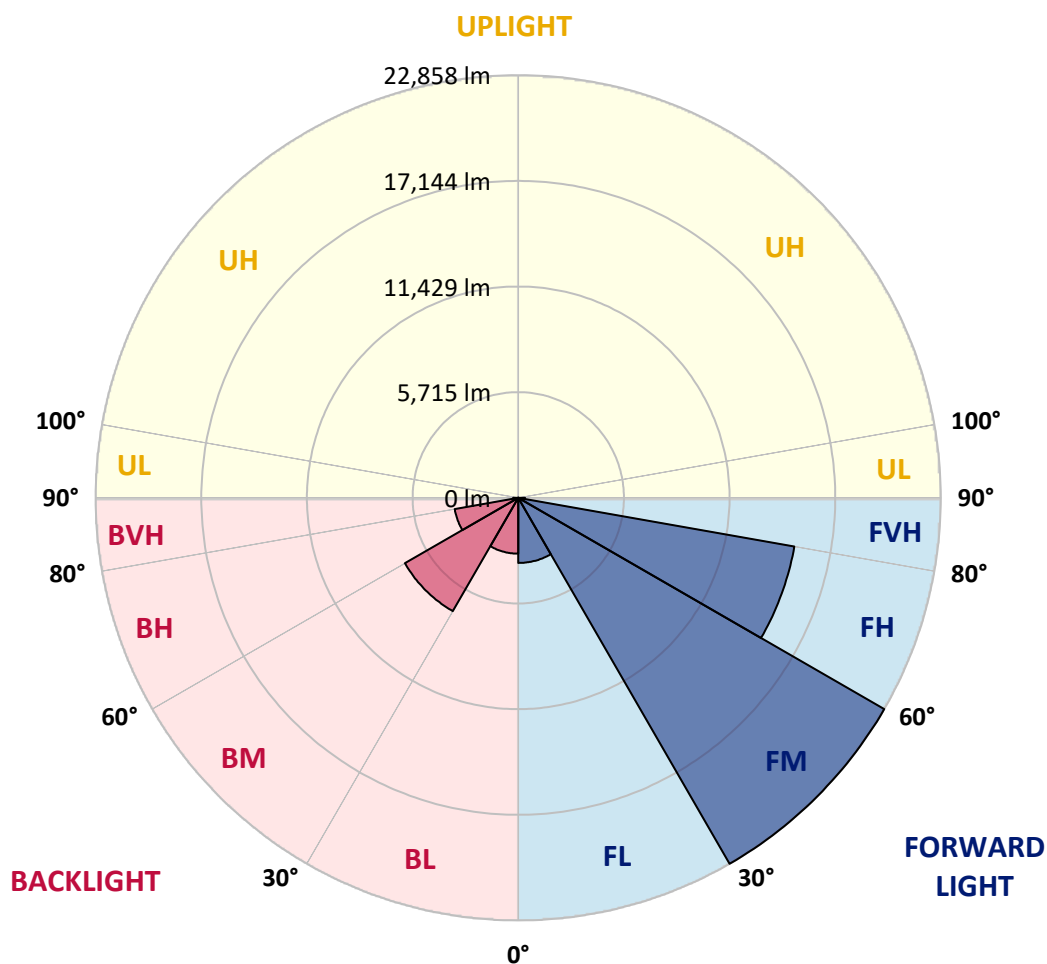
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3524.8	6.3			
FM	(30°-60°)	22858.4	41.0			
FH	(60°-80°)	15162.7	27.2			G5
FVH	(80°-90°)	365.0	0.7			G3/500
BL	(0°-30°)	3021.3	5.4	B4/5000		
BM	(30°-60°)	7079.2	12.7	B4/8500		
BH	(60°-80°)	3490.3	6.3	B4/5000		G4/5000
BVH	(80°-90°)	278.8	0.5			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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	6186.8	6186.8	6186.8	6186.8	6186.8	6186.8	6186.8	6186.8	6186.8	6186.8	6186.8
2.5°	6122.3	6157.5	6148.7	6134.0	6131.1	6137.0	6145.8	6154.5	6151.6	6166.3	6189.8
5°	6104.7	6139.9	6137.0	6137.0	6148.7	6172.1	6186.8	6201.5	6186.8	6204.4	6236.6
7.5°	6116.5	6142.8	6154.5	6166.3	6195.6	6239.6	6274.7	6306.9	6289.4	6309.9	6350.9
10°	6265.9	6286.4	6298.1	6298.1	6318.7	6368.5	6403.7	6462.3	6447.7	6479.8	6532.6
12.5°	6538.5	6559.0	6559.0	6547.3	6561.9	6594.1	6605.9	6670.4	6643.9	6696.7	6749.5
15°	6872.6	6913.6	6881.3	6860.8	6866.7	6899.0	6896.0	6945.8	6919.5	6963.4	7010.3
17.5°	7241.8	7294.6	7241.8	7239.0	7227.2	7262.3	7265.3	7309.3	7262.3	7294.6	7326.8
20°	7678.6	7751.8	7707.9	7722.5	7696.1	7710.8	7725.4	7789.9	7716.6	7740.1	7731.3
22.5°	8294.0	8381.9	8335.0	8390.8	8373.1	8361.4	8358.5	8472.8	8358.5	8367.3	8282.3
25°	9190.8	9296.3	9214.2	9290.5	9290.5	9328.5	9372.5	9519.1	9328.5	9272.9	9053.1
27.5°	10515.5	10621.0	10459.8	10506.7	10492.0	10585.8	10538.9	10902.3	10697.2	10606.4	10163.8
30°	12109.9	12297.4	11992.6	11980.9	11966.3	12115.7	12183.0	12423.4	12215.3	12124.5	11591.1
32.5°	13833.1	14029.5	13666.0	13560.5	13504.9	13595.7	13540.0	13733.5	13589.9	13449.1	12789.7
35°	15656.1	15849.5	15503.6	15298.4	15075.7	14885.3	14686.0	14735.8	14600.9	14387.0	13704.1
37.5°	17379.3	17733.9	17367.6	17147.7	16737.4	16365.3	15808.4	15576.9	15450.8	15254.5	14565.8
40°	19134.8	19337.0	19058.6	18871.1	18425.6	17842.4	16951.4	16462.0	16292.0	16101.5	15518.3
42.5°	20427.2	20620.7	20471.2	20342.3	19993.5	19316.5	18164.7	17552.2	17306.0	17092.1	16596.8
45°	21453.0	21596.6	21502.9	21549.7	21400.3	20743.7	19422.0	18721.6	18466.6	18205.7	17815.9
47.5°	21866.2	22018.6	22168.1	22446.6	22701.5	22217.9	20773.1	19987.7	19718.0	19451.3	19067.4
50°	21819.4	21974.7	22408.4	23000.5	23791.8	23630.6	22197.4	21335.8	21086.7	20781.9	20427.2
52.5°	21444.2	21620.1	22176.9	23161.6	24421.9	24688.6	23648.2	22727.9	22493.4	22130.1	21775.4
55°	20459.5	20565.0	21400.3	22795.3	24571.3	25427.1	25069.6	24210.8	23976.4	23469.4	23082.5
57.5°	18633.7	18786.1	20002.3	21807.7	24196.1	25928.3	26318.1	25770.0	25544.3	24814.6	24410.2
60°	16251.0	16494.2	17886.4	20148.8	23240.7	25925.3	27452.3	27302.8	27115.2	26139.2	25717.2
62.5°	13554.7	13836.1	15175.3	17804.2	21570.3	25189.7	28161.5	28586.4	28489.8	27361.4	26822.1
65°	10410.0	10603.4	11936.9	14771.0	18970.7	23610.1	28243.6	29462.7	29480.3	28290.4	27399.5
67.5°	6931.2	7488.0	8645.7	11084.0	15489.0	21028.1	27522.6	29606.3	29776.4	28609.9	27109.4
70°	3382.1	4114.8	5248.9	7203.8	11084.0	17068.6	25638.1	28428.2	28806.3	27677.9	25380.2
72.5°	1403.8	1641.2	2259.6	3555.0	6362.7	11517.8	21851.6	25233.7	25934.1	24524.5	21338.8
75°	946.6	1025.7	1292.4	1823.0	2898.5	5679.7	15758.6	18815.3	19943.7	18522.3	15140.2
77.5°	729.8	779.6	940.7	1274.9	1723.2	2148.2	8434.6	11339.1	11922.3	11037.2	7877.8
80°	574.4	612.5	703.4	929.1	1222.1	1148.8	2875.0	5137.6	5474.6	4592.5	2532.2
82.5°	498.3	512.9	504.1	630.1	811.8	671.2	943.7	1896.1	2092.5	1518.1	826.5
85°	360.5	401.5	419.1	389.8	430.8	340.0	386.8	671.2	738.5	659.4	466.0
87.5°	146.6	216.9	266.7	252.0	158.3	96.8	120.1	196.4	225.7	246.2	152.4
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°	6186.8	6186.8	6186.8	6186.8	6186.8	6186.8	6186.8	6186.8	6186.8	6186.8	6186.8
2.5°	6192.6	6213.1	6227.8	6245.4	6257.1	6274.7	6309.9	6330.4	6333.4	6348.0	6345.1
5°	6248.3	6277.6	6309.9	6356.7	6409.5	6453.5	6520.9	6567.8	6585.4	6600.1	6597.1
7.5°	6368.5	6409.5	6468.2	6550.2	6626.4	6685.0	6767.0	6822.8	6878.5	6899.0	6901.9
10°	6547.3	6605.9	6690.9	6802.2	6884.3	6960.5	7045.5	7092.4	7148.0	7171.5	7183.2
12.5°	6770.0	6831.5	6942.9	7098.2	7174.5	7227.2	7256.5	7244.8	7256.5	7277.0	7282.9
15°	7024.9	7092.4	7218.5	7385.4	7438.2	7391.4	7326.8	7268.3	7259.5	7265.3	7285.8
17.5°	7326.8	7376.7	7523.2	7663.9	7625.8	7432.4	7291.6	7197.9	7151.0	7136.4	7156.9
20°	7748.9	7748.9	7869.0	7957.0	7702.0	7373.7	7154.0	7001.6	6904.8	6863.8	6855.0
22.5°	8261.8	8214.9	8291.0	8229.5	7687.3	7209.6	6904.8	6641.1	6494.5	6435.9	6427.2
25°	8912.4	8856.7	8836.2	8455.2	7581.8	6948.8	6453.5	6134.0	6005.1	5972.9	5978.7
27.5°	9894.2	9753.5	9486.8	8578.3	7388.4	6538.5	5925.9	5629.9	5556.7	5559.6	5568.4
30°	11201.3	10919.9	10266.4	8598.8	7071.9	5958.2	5386.7	5175.7	5140.5	5155.1	5205.0
32.5°	12411.7	12145.0	11063.5	8505.0	6585.4	5389.7	4903.1	4762.5	4709.7	4727.3	4750.8
35°	13361.3	13288.0	11802.1	8373.1	5987.5	4856.2	4469.4	4349.2	4246.7	4223.2	4240.7
37.5°	14258.1	14228.7	12356.0	8188.5	5395.5	4478.1	4120.6	3962.3	3812.9	3730.8	3733.8
40°	15242.8	15213.5	12719.4	7904.2	4870.9	4149.9	3807.1	3599.0	3414.3	3264.8	3279.5
42.5°	16350.6	16177.7	12892.3	7496.8	4425.4	3871.5	3552.0	3270.7	3027.4	2889.7	2898.5
45°	17561.0	17171.2	12889.4	6978.1	4050.3	3616.5	3279.5	2881.0	2655.3	2526.3	2520.5
47.5°	18844.6	18120.8	12731.1	6403.7	3686.8	3335.1	2857.5	2552.7	2403.2	2324.1	2306.5
50°	20169.3	19008.8	12461.5	5744.2	3314.6	3015.8	2593.7	2385.6	2271.3	2198.0	2171.7
52.5°	21414.9	19814.8	12136.2	4996.9	2936.6	2705.1	2476.5	2315.3	2195.1	2113.0	2077.9
55°	22572.6	20509.3	11676.1	4232.0	2628.9	2497.0	2420.7	2286.0	2148.2	2051.5	2013.4
57.5°	23601.2	20960.6	10881.8	3514.0	2409.1	2353.4	2362.2	2236.1	2077.9	1995.9	1943.1
60°	24457.0	21291.8	9706.6	2848.7	2230.3	2212.7	2271.3	2142.4	1957.7	1864.0	1823.0
62.5°	24969.9	21286.0	8264.7	2332.9	2077.9	2083.7	2151.2	2025.1	1837.6	1749.7	1723.2
65°	24925.9	20764.3	6682.1	1995.9	1931.4	1937.2	2025.1	1896.1	1737.9	1685.2	1682.2
67.5°	24043.8	19492.3	5125.8	1776.0	1770.2	1796.5	1899.1	1808.3	1676.4	1670.5	1679.4
70°	21655.3	16851.7	3692.8	1600.2	1603.1	1641.2	1776.0	1752.5	1644.1	1655.9	1652.9
72.5°	17364.6	12848.4	2479.4	1415.5	1418.5	1480.0	1658.8	1708.6	1611.9	1767.2	1790.7
75°	11564.7	8012.6	1594.3	1219.2	1222.1	1301.2	1556.3	1623.6	1524.0	1761.4	1776.0
77.5°	5556.7	3601.8	1154.7	1025.7	1025.7	1099.0	1345.2	1453.7	1298.4	1368.7	1254.4
80°	1919.6	1354.0	908.6	826.5	808.9	858.7	1134.2	1260.2	1119.5	1031.7	967.2
82.5°	756.1	703.4	729.8	641.9	583.2	615.4	882.1	1040.4	823.6	744.5	741.5
85°	433.8	457.2	515.8	425.0	337.0	378.0	647.7	747.3	621.4	548.1	559.8
87.5°	117.3	161.2	237.4	219.8	152.4	161.2	307.7	413.3	357.5	275.5	284.2
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)