

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: P968258

Luminaire Tested: **NAV-SB5B-735-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968258
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-735-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29697.3 lumens
Efficiency: N/A
Efficacy: 162.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

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

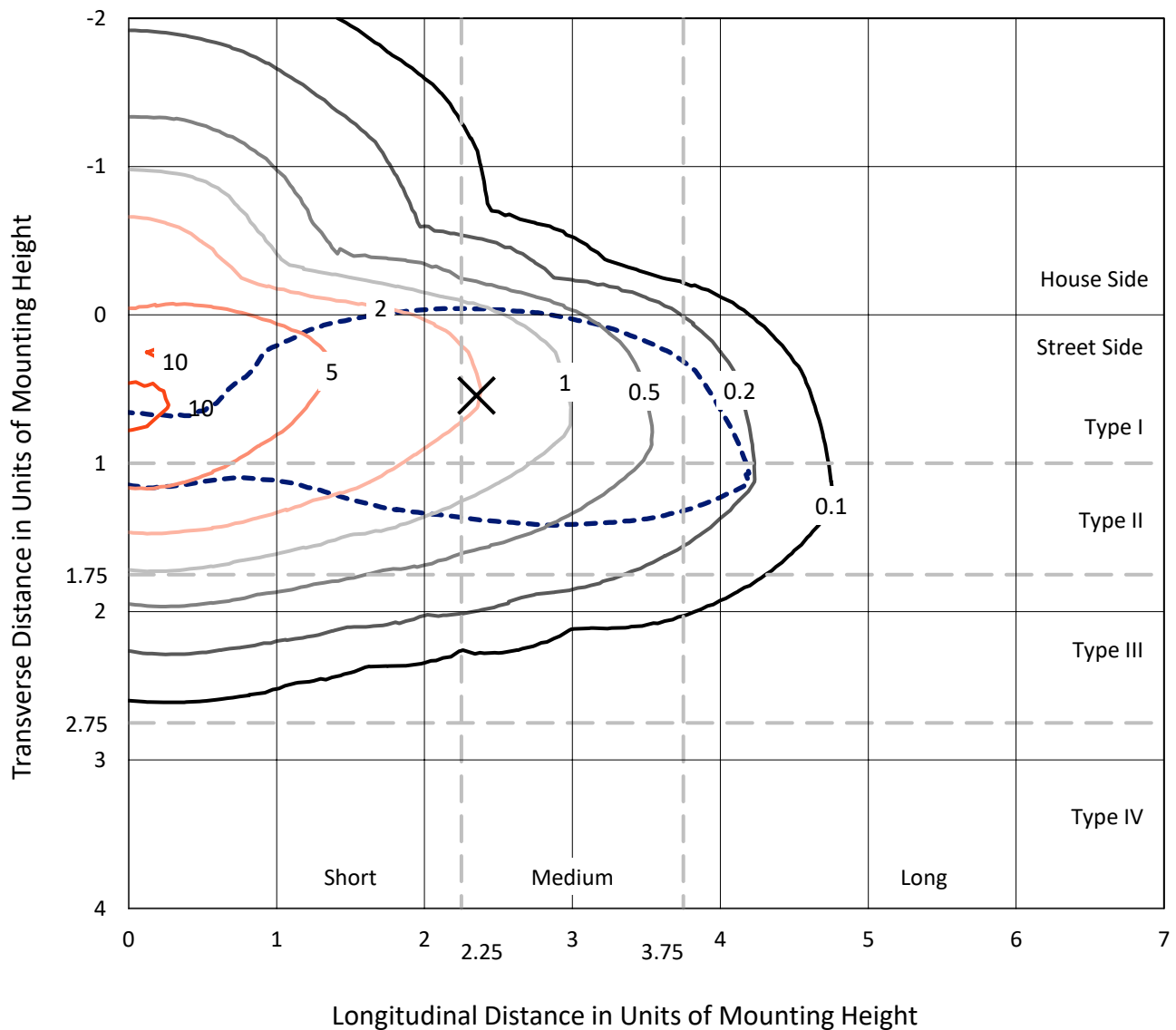


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Iso-Footcandle Lines of Horizontal Illumination

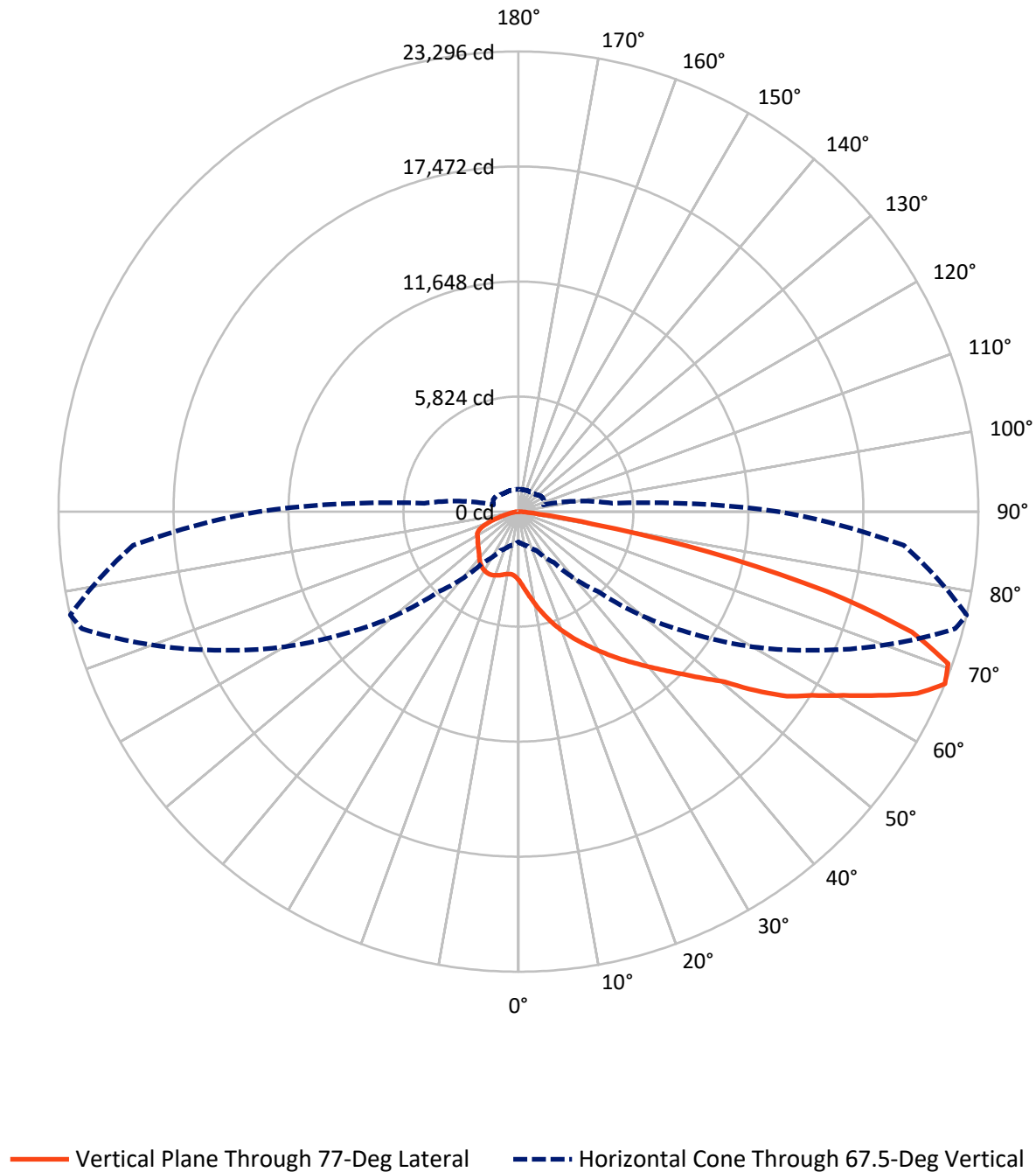
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.9 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5617.5	0.0	5617.5
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	24079.8	0.0	24079.8
	% Fixture	81.1	0.0	81.1
Total	Lumens	29697.3	0.0	29697.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	373.5	1.3
10°-20°	1341.8	4.5
20°-30°	2533.4	8.5
30°-40°	4081.3	13.7
40°-50°	5582.4	18.8
50°-60°	6297.0	21.2
60°-70°	5877.5	19.8
70°-80°	3221.9	10.8
80°-90°	388.6	1.3
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°	29697.3	100.0
0°-180°	29697.3	100.0

Coefficient of Utilization



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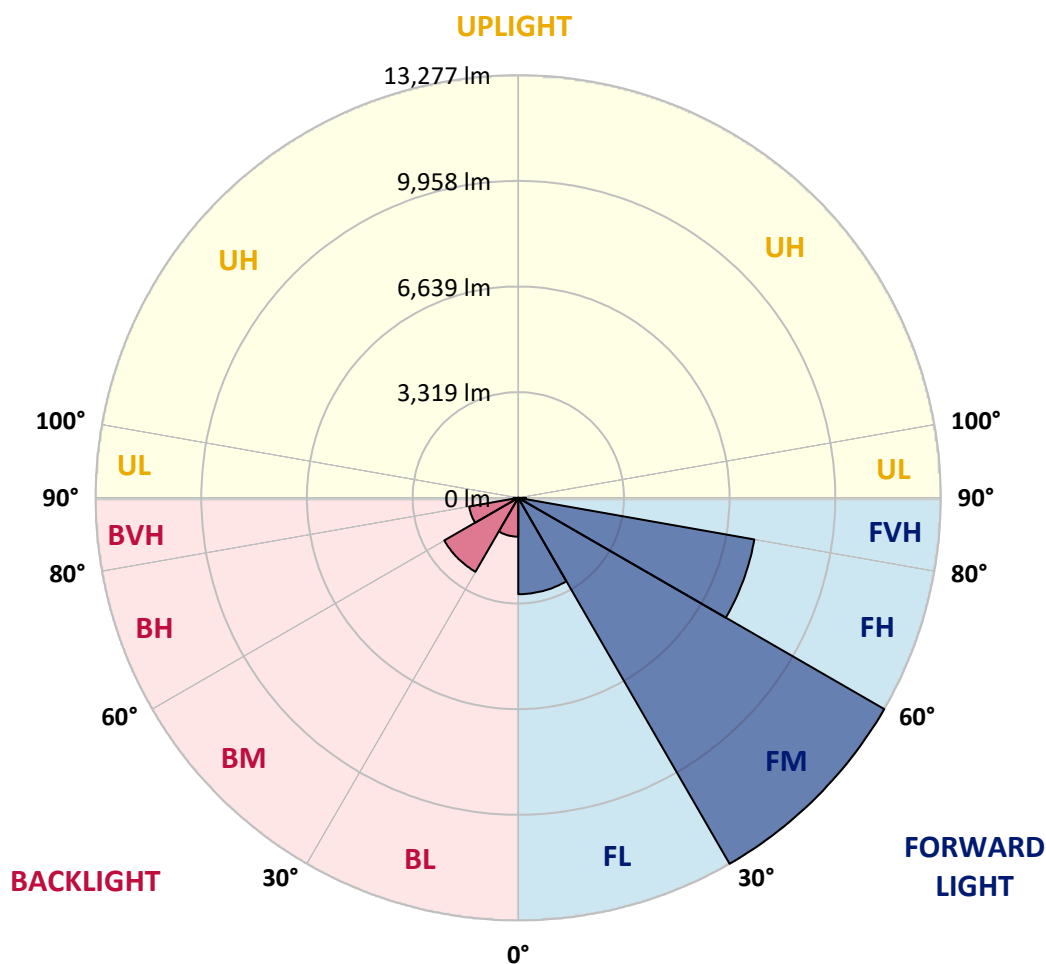
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3027.3	10.2			
FM	(30°-60°)	13277.3	44.7			
FH	(60°-80°)	7532.1	25.4			G4/12000
FVH	(80°-90°)	243.0	0.8			G3/500
BL	(0°-30°)	1221.4	4.1	B3/2500		
BM	(30°-60°)	2683.4	9.0	B3/5000		
BH	(60°-80°)	1567.2	5.3	B3/2500		G3/2500
BVH	(80°-90°)	145.6	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-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3484.4	3484.4	3484.4	3484.4	3484.4	3484.4	3484.4	3484.4	3484.4	3484.4	3484.4
2.5°	4362.8	4393.5	4355.1	4355.1	4226.4	4158.9	4030.2	3932.0	3755.7	3725.1	3608.6
5°	5156.9	5195.2	5141.5	5118.5	4966.8	4827.3	4611.2	4398.1	4083.8	4051.6	3777.2
7.5°	5771.6	5820.7	5773.1	5748.6	5613.7	5457.3	5204.4	4907.0	4464.0	4401.1	4004.1
10°	6272.9	6280.6	6265.2	6274.4	6168.7	6039.8	5780.8	5434.3	4880.9	4795.1	4278.5
12.5°	6556.5	6591.8	6622.4	6677.6	6659.2	6579.5	6346.5	5932.6	5322.4	5212.0	4577.4
15°	6689.9	6751.2	6820.1	6947.3	7050.1	7070.0	6892.2	6467.5	5771.6	5638.2	4879.4
17.5°	6737.3	6795.6	6904.5	7088.4	7309.2	7457.9	7378.2	6987.2	6216.1	6062.9	5196.8
20°	6978.0	6994.9	7060.8	7235.6	7474.7	7721.5	7781.3	7487.0	6656.1	6482.9	5524.7
22.5°	7493.2	7459.3	7477.8	7557.5	7729.2	7968.4	8104.8	7928.5	7108.4	6909.0	5855.9
25°	8343.9	8245.8	8147.7	8055.7	8143.1	8278.0	8432.8	8369.9	7582.0	7329.1	6190.1
27.5°	9418.5	9298.9	9082.8	8780.8	8675.0	8722.5	8791.5	8779.2	8020.4	7764.5	6535.0
30°	10476.2	10336.7	10079.2	9642.3	9363.3	9237.6	9185.5	9150.3	8497.2	8224.3	6883.0
32.5°	11320.9	11210.5	10957.6	10468.6	10063.9	9849.2	9676.0	9550.3	8995.4	8722.5	7251.0
35°	12059.8	11957.1	11667.4	11133.9	10693.9	10465.6	10238.6	9970.4	9513.5	9237.6	7646.4
37.5°	12734.3	12631.6	12234.6	11679.7	11236.6	11078.7	10876.4	10421.1	10033.2	9772.7	8064.9
40°	13160.5	13137.4	12766.5	12137.9	11678.1	11599.9	11532.5	10943.8	10609.6	10367.4	8524.8
42.5°	13269.3	13319.9	13025.6	12509.0	12070.5	12007.7	12165.6	11535.6	11256.6	11025.0	9046.0
45°	13007.1	13152.8	12959.7	12608.6	12349.5	12315.8	12726.6	12182.4	11972.4	11760.8	9674.5
47.5°	12343.4	12590.2	12510.5	12461.4	12424.6	12570.3	13220.2	12869.2	12783.4	12599.4	10392.0
50°	11003.6	11471.2	11610.7	11920.3	12275.9	12768.0	13669.4	13618.9	13730.7	13545.3	11265.8
52.5°	8687.3	9331.1	10140.5	10916.2	11819.2	12702.1	14163.0	14694.9	15167.1	15066.0	12654.5
55°	7171.2	7460.9	8083.3	9505.8	10933.1	12424.6	14385.3	15564.1	16592.8	16502.3	13707.7
57.5°	6006.1	6265.2	6648.5	7836.5	9593.3	11794.6	14523.2	16094.6	17569.2	17560.1	14747.1
60°	4756.8	5031.2	5423.6	6265.2	8028.1	10706.2	14492.6	16698.6	18815.5	18892.2	16014.8
62.5°	3346.4	3648.5	4083.8	4868.6	6429.2	9295.8	13867.1	17135.4	20282.6	20491.1	17540.1
65°	2199.8	2399.1	2727.1	3404.7	4790.5	7482.4	12673.0	17192.1	21852.4	22204.9	18971.9
67.5°	1542.1	1618.8	1812.0	2179.9	3157.9	5737.8	10770.6	16605.0	22899.3	23296.4	19592.8
70°	1203.4	1241.7	1339.8	1487.0	1983.7	3858.5	8253.5	15078.2	22675.6	23089.5	18944.4
72.5°	1039.4	1076.1	1112.9	1131.3	1330.7	2382.2	5590.7	12607.1	20567.8	20848.3	16471.6
75°	942.8	951.9	982.7	976.5	1014.9	1545.2	3226.9	9185.5	16227.9	16131.3	12159.5
77.5°	792.5	804.8	855.4	847.8	901.4	1056.2	1675.6	5928.0	10520.7	9864.6	6768.0
80°	671.5	677.5	732.8	723.5	783.3	765.0	855.4	3021.5	4462.4	3780.3	1951.5
82.5°	233.0	288.2	559.5	576.4	597.9	463.0	493.6	1232.5	1362.8	1044.0	409.3
85°	113.5	121.2	285.2	404.7	403.1	233.0	240.7	439.9	429.3	337.2	136.4
87.5°	18.3	23.0	33.7	157.8	125.7	61.3	82.8	85.9	88.9	76.7	30.6
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°	3484.4	3484.4	3484.4	3484.4	3484.4	3484.4	3484.4	3484.4	3484.4	3484.4	3484.4
2.5°	3522.7	3446.0	3285.1	3136.4	3020.0	2908.0	2845.2	2791.5	2760.8	2754.7	2754.7
5°	3617.7	3459.9	3167.0	2920.3	2759.3	2639.8	2577.0	2537.1	2517.1	2504.9	2503.4
7.5°	3754.3	3522.7	3105.7	2825.2	2656.6	2570.8	2538.6	2532.5	2530.9	2532.5	2537.1
10°	3942.8	3625.4	3099.6	2802.2	2661.2	2613.6	2612.2	2613.6	2619.8	2621.3	2622.9
12.5°	4146.6	3731.2	3124.2	2822.1	2719.4	2693.4	2688.8	2687.2	2691.9	2694.9	2696.5
15°	4369.0	3870.7	3165.6	2865.1	2783.9	2756.2	2751.7	2742.5	2741.0	2739.4	2737.9
17.5°	4597.3	4008.7	3211.5	2911.1	2825.2	2786.9	2770.1	2748.6	2731.7	2727.1	2731.7
20°	4828.8	4145.1	3243.7	2934.1	2828.3	2774.7	2741.0	2704.2	2675.0	2658.1	2664.3
22.5°	5075.6	4287.7	3263.7	2927.9	2800.7	2727.1	2665.8	2622.9	2578.5	2549.3	2550.8
25°	5316.3	4411.9	3262.2	2895.7	2747.1	2653.5	2575.4	2520.2	2458.9	2428.2	2428.2
27.5°	5547.8	4523.7	3223.8	2839.0	2670.4	2566.2	2472.7	2406.7	2346.9	2317.8	2316.3
30°	5786.9	4617.3	3164.1	2756.2	2579.9	2465.0	2362.3	2305.5	2251.9	2224.4	2222.8
32.5°	6024.5	4703.1	3079.7	2653.5	2475.7	2365.4	2264.2	2212.1	2179.9	2179.9	2181.4
35°	6276.0	4762.9	2967.8	2534.0	2365.4	2259.6	2179.9	2149.2	2146.1	2127.8	2123.2
37.5°	6541.1	4801.2	2831.4	2411.3	2256.5	2156.9	2132.3	2095.5	2064.9	2025.0	2018.9
40°	6820.1	4839.5	2667.4	2284.1	2141.5	2086.4	2075.6	2026.5	1939.2	1841.1	1827.3
42.5°	7158.9	4865.6	2497.2	2156.9	2020.5	2002.0	2017.4	1933.0	1793.5	1720.0	1721.5
45°	7551.4	4908.5	2340.8	2031.1	1896.2	1896.2	1960.6	1850.3	1735.3	1689.3	1697.0
47.5°	8060.3	5008.2	2195.2	1893.2	1781.3	1812.0	1835.0	1750.6	1686.2	1629.5	1628.0
50°	8796.1	5247.3	2045.0	1753.7	1693.9	1755.2	1723.0	1674.0	1598.9	1552.9	1548.3
52.5°	9709.7	5388.3	1911.6	1628.0	1618.8	1680.1	1634.2	1588.1	1531.5	1470.2	1457.9
55°	10332.1	5414.5	1799.7	1536.1	1568.2	1562.1	1545.2	1503.9	1473.1	1391.9	1393.5
57.5°	11028.1	5466.5	1707.8	1480.8	1536.1	1468.6	1462.5	1427.2	1387.3	1332.2	1313.7
60°	11860.5	5547.8	1628.0	1459.4	1508.4	1407.2	1376.6	1362.8	1323.0	1295.4	1303.0
62.5°	12768.0	5621.4	1546.7	1462.5	1476.2	1347.5	1301.4	1296.9	1272.3	1263.2	1263.2
65°	13387.3	5420.5	1445.6	1459.4	1425.7	1286.2	1227.9	1226.4	1206.4	1203.4	1201.8
67.5°	13171.1	4784.4	1309.1	1416.4	1373.5	1224.9	1160.4	1154.4	1128.2	1129.8	1129.8
70°	12089.0	3876.9	1120.6	1310.7	1309.1	1169.6	1090.0	1070.0	1034.7	1040.9	1047.0
72.5°	10059.2	2872.8	867.7	1134.4	1206.4	1119.1	1008.7	976.5	932.0	938.2	936.6
75°	7264.7	1953.0	631.6	863.0	1050.1	1059.2	929.0	873.8	820.1	829.3	832.4
77.5°	3717.5	1106.8	464.5	594.8	824.7	962.7	856.9	783.3	771.1	856.9	844.7
80°	1212.6	554.9	322.0	417.0	541.1	787.9	751.1	666.9	663.8	683.7	587.1
82.5°	361.8	234.5	206.9	274.4	298.9	604.0	648.4	504.3	433.8	456.8	472.1
85°	124.1	113.5	118.1	136.4	142.6	354.1	453.8	334.2	315.8	348.0	343.4
87.5°	29.1	39.9	33.7	30.6	30.6	85.9	176.3	139.5	193.1	128.7	124.1
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)