

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: P968415

Luminaire Tested: **NAV-SB5B-830-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968415
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-SB5B-830-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26549.5 lumens
Efficiency: N/A
Efficacy: 145.3 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): 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

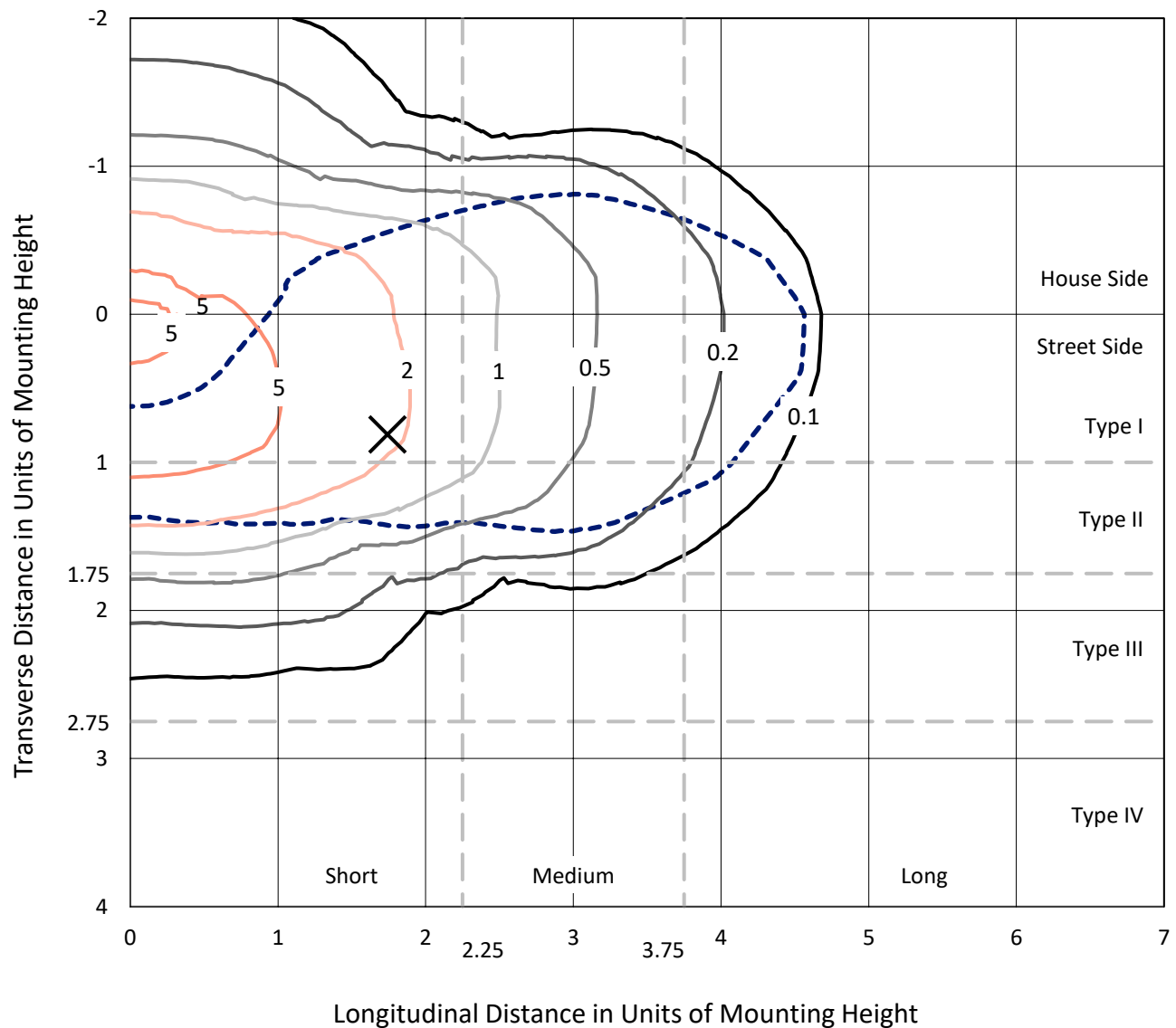


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

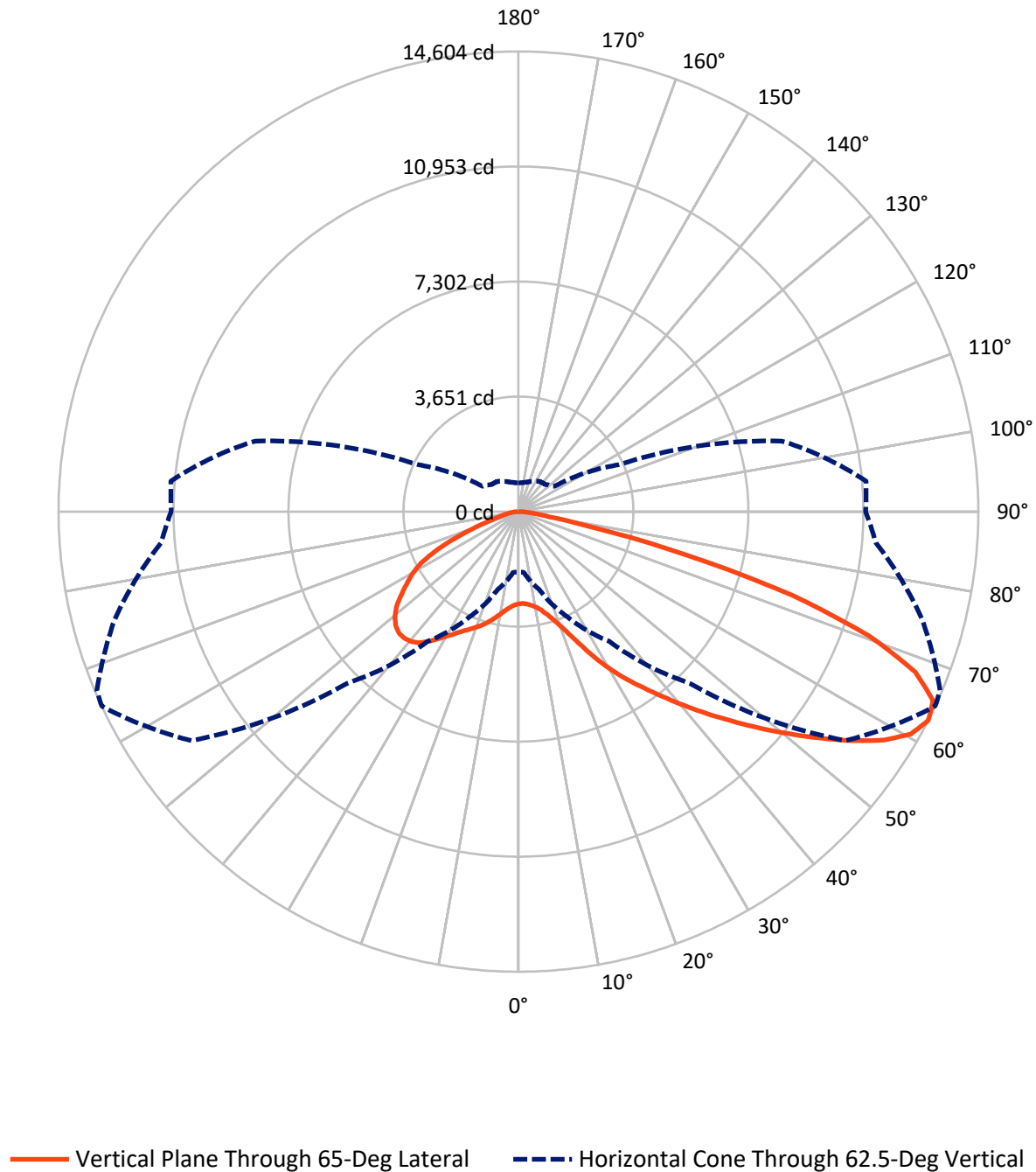


Based on 25 foot mounting height. Maximum calculated value = 7.4 fc

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	8377.9	0.0	8377.9
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	18171.7	0.0	18171.7
	% Fixture	68.4	0.0	68.4
Total	Lumens	26549.5	0.0	26549.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	291.7	1.1
10°-20°	989.1	3.7
20°-30°	2005.6	7.6
30°-40°	3470.6	13.1
40°-50°	5252.1	19.8
50°-60°	6157.7	23.2
60°-70°	5162.5	19.4
70°-80°	2850.1	10.7
80°-90°	370.2	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°	26549.5	100.0
0°-180°	26549.5	100.0

Coefficient of Utilization



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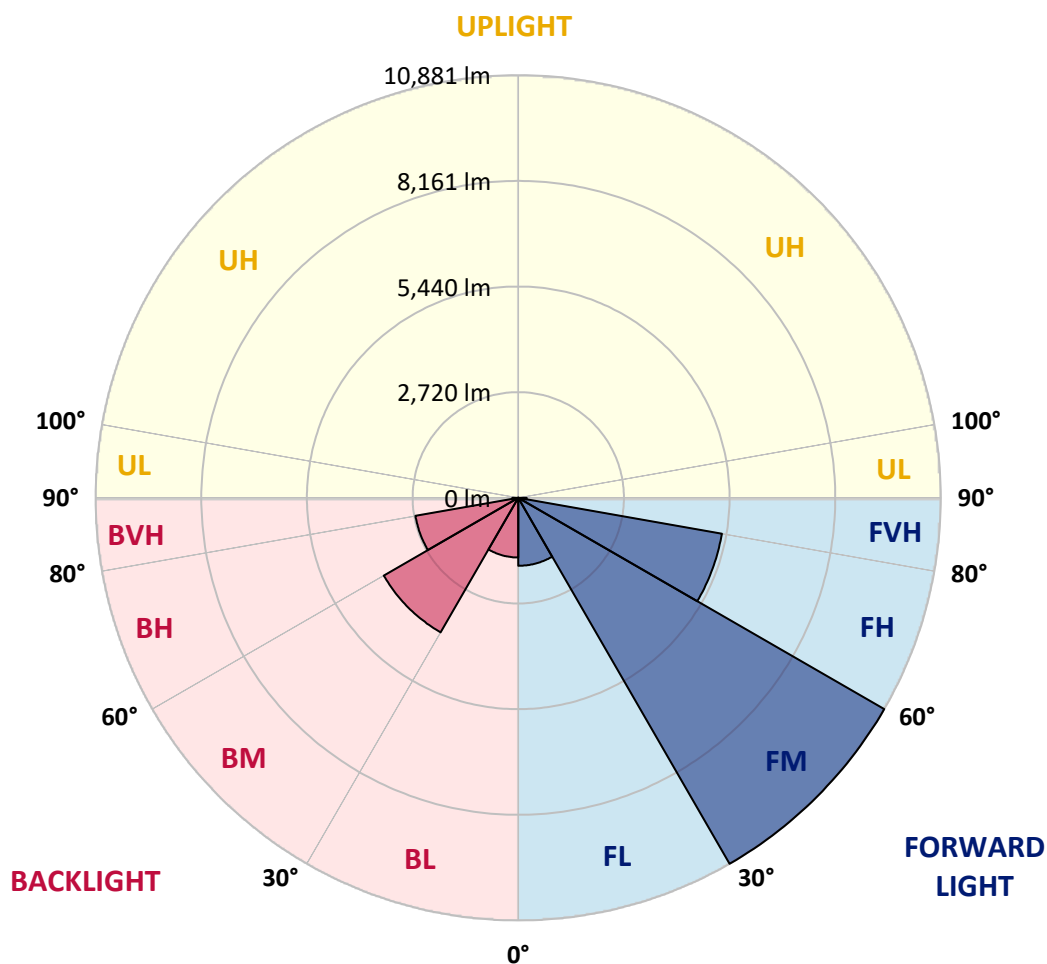
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1750.0	6.6			
FM	(30°-60°)	10880.9	41.0			
FH	(60°-80°)	5325.1	20.1			G3/7500
FVH	(80°-90°)	215.8	0.8			G2/225
BL	(0°-30°)	1536.4	5.8	B3/2500		
BM	(30°-60°)	3999.5	15.1	B3/5000		
BH	(60°-80°)	2687.6	10.1	B4/5000		G4/5000
BVH	(80°-90°)	154.4	0.6			G2/225
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°	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7
2.5°	2906.4	2898.1	2905.0	2905.0	2907.7	2906.4	2916.0	2918.8	2922.9	2931.2	2931.2
5°	2877.5	2876.0	2888.4	2899.5	2910.5	2920.1	2932.5	2950.5	2953.2	2962.9	2975.3
7.5°	2867.7	2859.5	2878.8	2892.5	2918.8	2942.2	2975.3	3005.5	3017.9	3022.1	3045.5
10°	2942.2	2928.4	2946.3	2954.6	2976.6	3000.1	3038.6	3086.8	3100.6	3117.1	3143.3
12.5°	3068.8	3053.8	3079.9	3092.3	3112.9	3133.6	3159.8	3206.6	3213.5	3243.8	3268.6
15°	3242.5	3224.5	3241.0	3256.2	3290.7	3309.9	3336.1	3381.6	3381.6	3404.9	3422.9
17.5°	3478.0	3454.6	3467.0	3472.5	3494.5	3523.4	3567.5	3607.5	3628.1	3619.9	3595.1
20°	3829.2	3800.3	3800.3	3772.7	3764.5	3787.9	3845.8	3900.8	3922.9	3880.2	3819.6
22.5°	4356.8	4315.5	4292.1	4198.4	4161.2	4164.0	4221.8	4289.3	4307.2	4231.4	4095.1
25°	5027.6	4962.8	4931.2	4793.4	4709.4	4636.4	4681.9	4768.6	4793.4	4699.7	4479.4
27.5°	5698.4	5702.5	5672.2	5506.9	5367.8	5234.2	5210.8	5301.7	5327.8	5221.8	4949.1
30°	6639.1	6541.3	6483.5	6285.2	6086.9	5899.5	5803.0	5840.2	5847.1	5720.4	5403.6
32.5°	7450.5	7425.7	7301.7	7128.2	6873.3	6580.0	6418.8	6359.5	6348.5	6168.1	5792.1
35°	8374.8	8360.9	8230.1	8023.5	7748.0	7340.3	7049.6	6880.2	6866.5	6613.0	6176.3
37.5°	9314.2	9314.2	9186.0	8960.1	8675.0	8165.4	7723.2	7454.6	7410.5	7080.0	6567.6
40°	10063.4	10018.0	10041.4	9946.4	9619.9	9078.6	8471.1	8081.3	8022.1	7625.4	6983.5
42.5°	10489.0	10474.0	10614.4	10720.5	10586.9	10154.4	9294.8	8760.4	8677.8	8225.9	7462.9
45°	10584.2	10567.5	10818.3	11206.7	11394.0	11216.4	10190.1	9475.3	9374.8	8854.1	7976.7
47.5°	10365.1	10332.0	10699.8	11312.7	11913.4	12226.0	11159.9	10250.8	10104.8	9465.7	8504.2
50°	9706.6	9675.0	10231.4	11045.5	12088.2	12911.9	12212.3	11073.1	10849.9	10121.3	9037.2
52.5°	8275.5	8290.7	9162.6	10281.1	11858.2	13338.9	13118.6	11939.5	11670.9	10792.1	9537.3
55°	6446.3	6479.4	7551.1	8782.4	10938.1	13274.3	13737.0	12832.1	12564.9	11423.0	10053.8
57.5°	4615.8	4761.7	5765.9	6984.9	9170.9	12248.0	13872.0	13680.6	13421.6	12111.7	10559.3
60°	2991.8	3017.9	4051.0	5279.7	6983.5	10424.4	13598.0	14323.9	14121.3	12814.1	10982.2
62.5°	1917.4	1935.3	2564.8	3692.9	5026.2	7712.2	12675.0	14603.5	14541.5	13278.4	11388.6
65°	1409.1	1395.3	1723.1	2440.8	3385.7	4756.2	10883.0	14468.5	14591.1	13569.0	11724.7
67.5°	1176.3	1157.0	1318.1	1690.1	2494.5	2701.1	8052.4	13591.0	14040.0	13535.9	11971.2
70°	1071.6	1055.1	1152.9	1254.8	1946.3	1808.5	4059.3	11815.5	12506.9	13159.9	11931.2
72.5°	907.7	878.8	1012.4	1114.4	1513.8	1387.0	1677.7	9075.9	9918.8	11954.7	11369.2
75°	703.9	684.6	798.9	980.7	1137.8	1082.6	1060.6	5511.1	6431.2	9245.3	9946.4
77.5°	557.8	531.7	636.3	764.4	1023.5	816.8	772.7	2373.3	3285.1	5902.3	7442.2
80°	420.1	396.7	483.5	604.6	786.5	615.7	500.0	968.3	1238.3	2990.3	3742.5
82.5°	298.9	278.3	337.4	443.5	528.9	552.4	307.2	542.7	610.2	1152.9	836.1
85°	191.5	179.1	225.9	278.3	336.1	355.4	187.4	283.7	311.3	475.2	348.5
87.5°	104.7	85.4	121.3	129.5	155.7	141.9	89.5	103.3	111.5	172.2	147.4
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°	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7
2.5°	2936.6	2940.8	2954.6	2958.7	2968.3	2980.7	2989.0	2997.3	2997.3	3005.5	3005.5
5°	2976.6	2986.2	3015.1	3030.3	3055.1	3079.9	3095.1	3112.9	3124.0	3129.5	3132.3
7.5°	3053.8	3068.8	3110.3	3136.4	3179.1	3213.5	3237.0	3261.8	3267.3	3282.4	3276.9
10°	3158.4	3176.4	3223.2	3272.7	3323.8	3366.4	3388.4	3406.4	3413.2	3416.0	3409.2
12.5°	3278.3	3304.4	3365.1	3425.7	3479.4	3516.6	3522.1	3517.9	3498.6	3482.1	3482.1
15°	3425.7	3449.0	3516.6	3582.7	3635.1	3641.9	3607.5	3585.4	3562.0	3557.9	3557.9
17.5°	3602.0	3614.4	3676.4	3741.0	3745.2	3721.8	3670.8	3650.1	3628.1	3613.0	3614.4
20°	3807.2	3803.1	3847.1	3874.7	3845.8	3774.2	3697.0	3662.5	3640.5	3622.7	3624.0
22.5°	4052.3	4020.7	4015.2	4008.3	3931.2	3781.0	3676.4	3632.3	3597.9	3573.0	3581.2
25°	4409.1	4287.9	4203.9	4157.1	3983.5	3743.8	3610.3	3512.5	3447.7	3404.9	3421.6
27.5°	4855.4	4651.6	4439.5	4325.1	3983.5	3668.1	3450.5	3292.0	3186.0	3141.9	3164.0
30°	5281.0	5067.5	4754.9	4527.6	3973.8	3544.1	3192.9	2972.5	2848.5	2804.4	2830.6
32.5°	5644.7	5411.9	5089.5	4749.3	3950.5	3343.0	2873.3	2629.5	2509.7	2457.3	2483.5
35°	5982.1	5734.3	5425.6	4993.2	3888.4	3048.2	2522.0	2336.1	2202.5	2118.5	2146.0
37.5°	6327.8	6033.2	5743.9	5213.6	3776.9	2703.8	2252.1	2093.7	1936.6	1823.7	1854.0
40°	6703.9	6351.3	6084.1	5344.3	3593.6	2376.1	2042.7	1898.1	1731.4	1611.6	1635.0
42.5°	7143.3	6732.8	6462.8	5411.9	3343.0	2143.3	1906.4	1764.4	1607.4	1509.6	1528.9
45°	7602.0	7153.0	6808.6	5410.6	3063.4	2034.4	1862.3	1721.8	1548.3	1446.3	1462.8
47.5°	8082.7	7592.4	7107.5	5322.3	2821.0	2049.6	1837.5	1629.4	1438.1	1338.9	1352.6
50°	8564.8	8073.1	7396.7	5157.1	2717.7	2016.6	1745.2	1500.0	1274.1	1184.6	1190.1
52.5°	9042.8	8584.1	7646.1	4921.5	2612.9	1894.0	1626.8	1332.0	1206.6	1144.6	1144.6
55°	9523.5	9089.6	7917.4	4578.6	2351.2	1750.7	1428.3	1268.6	1152.9	1096.4	1090.9
57.5°	10005.6	9673.6	8175.0	4235.6	2022.0	1574.4	1319.6	1191.5	1099.2	1050.9	1042.7
60°	10507.0	10341.7	8440.9	3920.1	1697.0	1348.5	1239.6	1129.4	1035.9	982.1	978.0
62.5°	11023.5	11077.3	8648.8	3513.8	1398.1	1210.7	1168.1	1055.1	964.2	913.3	911.8
65°	11544.2	11786.6	8785.2	2950.5	1133.6	1079.9	1090.9	973.9	881.5	837.4	836.1
67.5°	11936.7	12297.6	8746.6	2232.8	929.8	955.9	994.5	888.5	801.7	767.2	768.6
70°	11980.8	12237.1	8366.5	1528.9	778.3	834.8	887.0	804.4	714.8	690.1	691.5
72.5°	11394.0	11410.6	7307.2	998.7	658.4	732.8	774.1	719.0	632.2	607.4	606.1
75°	9855.5	9436.8	5365.1	658.4	550.9	629.5	668.1	629.5	545.5	550.9	531.7
77.5°	7467.0	6683.2	3257.7	468.3	460.0	528.9	581.3	553.7	482.1	541.3	476.6
80°	3847.1	3615.7	1453.1	349.8	363.7	422.9	478.0	442.2	381.5	363.7	332.0
82.5°	881.5	1024.8	573.0	250.7	263.1	304.4	365.0	332.0	274.1	231.4	228.7
85°	308.5	337.4	253.5	157.0	154.3	190.0	247.9	221.8	185.9	148.7	157.0
87.5°	97.8	128.1	95.0	63.3	66.1	85.4	114.3	104.7	86.8	56.5	59.2
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)