

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: P969240

Luminaire Tested: **NAV-SB5D-727-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969240
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-727-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 47762.9 lumens
Efficiency: N/A
Efficacy: 130.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G5

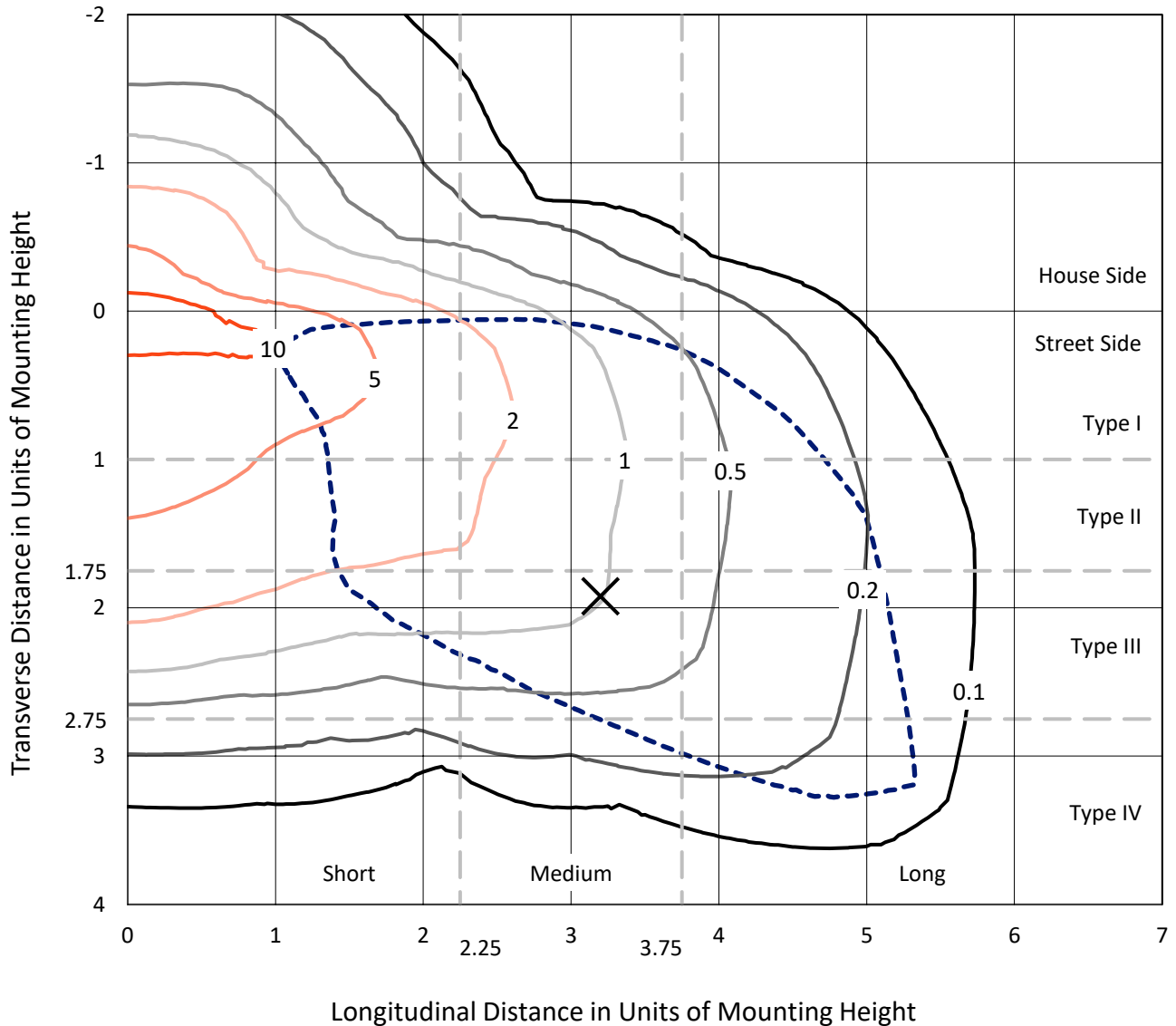
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

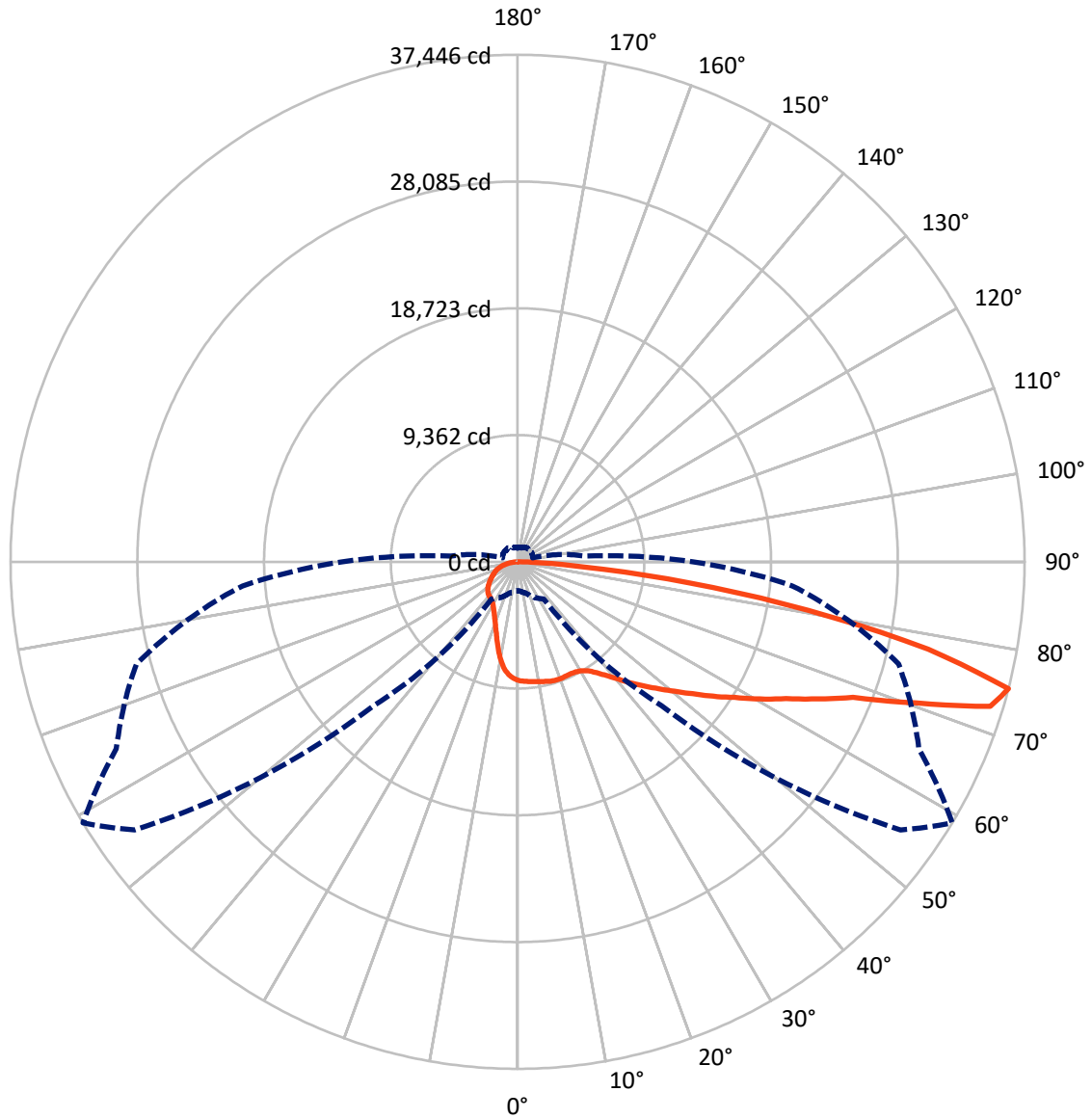
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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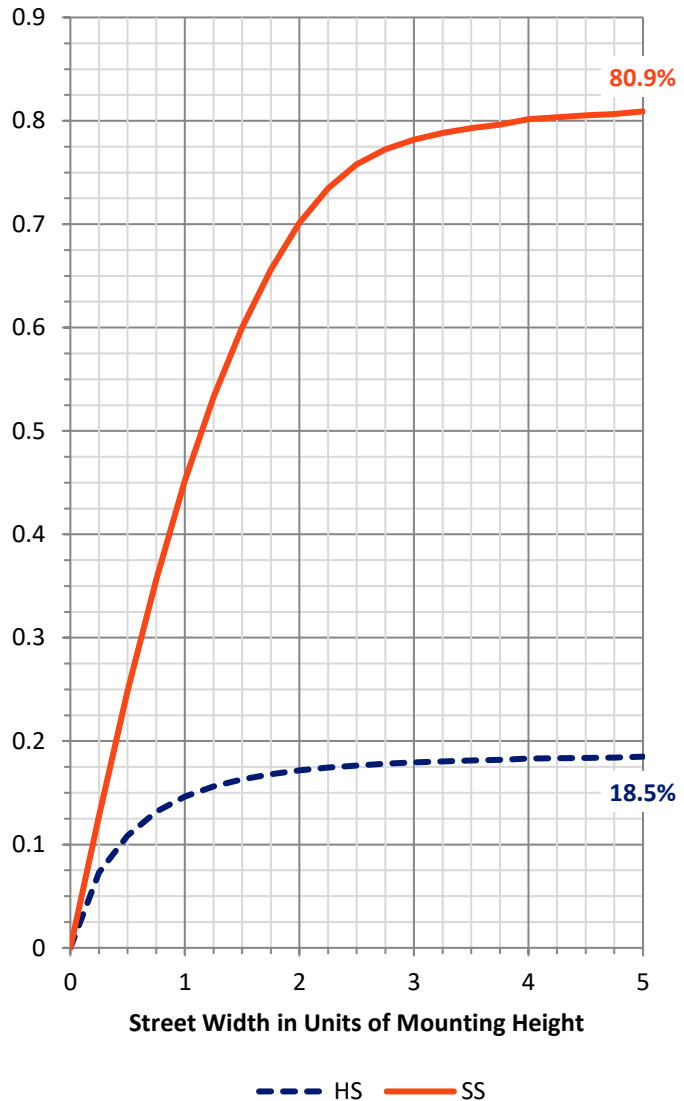
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8958.3	0.0	8958.3
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	38804.7	0.0	38804.7
	% Fixture	81.2	0.0	81.2
Total	Lumens	47762.9	0.0	47762.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	786.1	1.6
10°-20°	2009.3	4.2
20°-30°	3051.9	6.4
30°-40°	4536.6	9.5
40°-50°	6746.8	14.1
50°-60°	9157.9	19.2
60°-70°	11180.3	23.4
70°-80°	8774.2	18.4
80°-90°	1519.9	3.2
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°	47762.9	100.0
0°-180°	47762.9	100.0

Coefficient of Utilization



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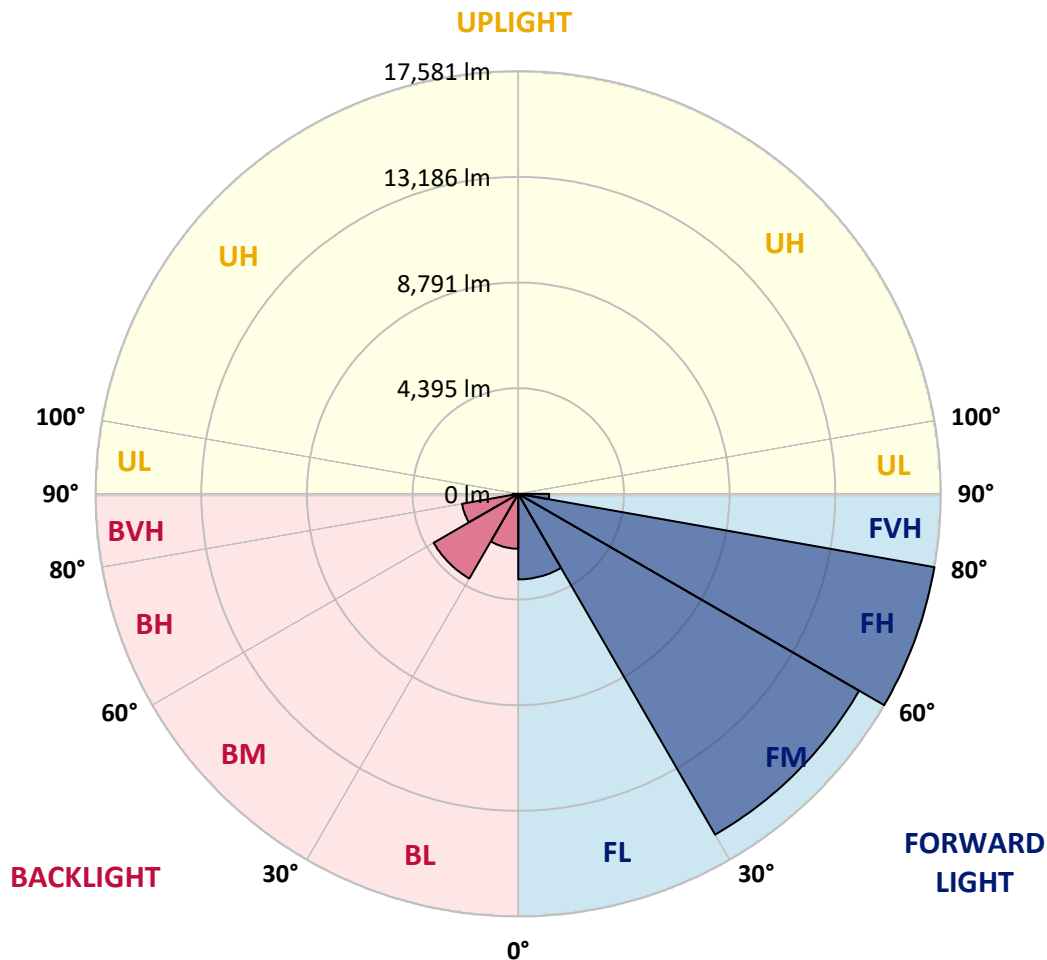
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3561.2	7.5			
FM (30°-60°)	16375.1	34.3			
FH (60°-80°)	17581.1	36.8			G5
FVH (80°-90°)	1287.2	2.7			G5
BL (0°-30°)	2286.1	4.8	B3/2500		
BM (30°-60°)	4066.2	8.5	B3/5000		
BH (60°-80°)	2373.4	5.0	B3/2500		G3/2500
BVH (80°-90°)	232.7	0.5			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	8766.8	8766.8	8766.8	8766.8	8766.8	8766.8	8766.8	8766.8	8766.8	8766.8	8766.8
2.5°	8841.3	8810.5	8841.3	8828.4	8823.3	8813.1	8815.6	8833.6	8823.3	8836.1	8792.4
5°	8782.2	8764.3	8795.0	8787.3	8820.7	8825.9	8859.3	8879.9	8892.7	8895.3	8861.8
7.5°	8684.5	8666.6	8710.2	8746.2	8818.2	8838.7	8908.1	8941.5	8959.5	8990.3	8941.5
10°	8327.4	8319.7	8427.7	8563.8	8733.4	8838.7	8944.0	9000.6	9028.8	9111.1	9054.5
12.5°	7695.4	7705.6	7847.0	8109.0	8448.2	8787.3	8985.2	9067.4	9111.1	9213.8	9188.2
15°	7091.6	7089.0	7243.2	7523.2	7998.5	8561.2	9005.8	9147.1	9221.6	9373.1	9352.6
17.5°	6742.1	6731.8	6839.7	7053.0	7494.9	8214.3	8954.4	9190.8	9350.0	9540.2	9522.1
20°	6677.9	6657.3	6713.9	6819.2	7132.7	7834.1	8820.7	9190.8	9452.9	9699.5	9689.2
22.5°	6911.7	6878.3	6855.2	6842.3	6981.1	7520.6	8669.1	9159.9	9604.5	9928.2	9910.2
25°	7381.8	7330.5	7212.3	7096.7	7055.6	7379.3	8535.6	9152.2	9830.5	10236.5	10169.6
27.5°	8142.4	8078.2	7839.2	7561.7	7312.6	7451.2	8476.4	9198.5	10079.7	10562.8	10429.2
30°	9085.4	9016.0	8715.4	8288.9	7841.8	7718.5	8551.0	9334.6	10398.3	10997.0	10734.9
32.5°	9930.7	9853.6	9596.7	9162.5	8558.6	8180.9	8787.3	9594.1	10899.3	11600.8	11194.8
35°	10681.0	10591.0	10359.8	9959.0	9437.4	8831.0	9213.8	10054.0	11611.1	12582.4	11819.3
37.5°	11415.8	11310.5	11058.7	10634.8	10269.9	9696.9	9802.3	10645.0	12556.7	13774.6	12646.6
40°	12238.0	12086.5	11780.7	11361.9	11007.3	10711.9	10575.6	11369.6	13517.6	15105.5	13679.4
42.5°	13034.5	12890.7	12525.8	12168.7	11724.2	11639.4	11472.3	12217.5	14568.5	16567.5	14727.8
45°	13892.7	13720.5	13278.7	12826.4	12546.4	12256.0	12340.8	13065.4	15598.9	18057.7	15827.5
47.5°	14697.0	14504.3	13982.6	13479.1	13324.9	12775.1	13137.3	13998.1	16670.3	19568.5	16916.9
50°	15131.2	14941.0	14506.8	14052.0	13931.3	13414.8	14000.7	15023.2	17793.1	21074.2	17962.6
52.5°	15493.5	15287.9	14720.0	14468.3	14432.3	14111.2	15064.4	16194.9	18915.9	22405.2	18972.4
55°	15878.9	15650.2	14925.6	14699.5	14863.9	14892.2	16326.0	17523.3	20102.9	23702.7	19925.7
57.5°	16323.3	16033.0	15123.5	14894.8	15285.3	15806.9	17775.1	18900.5	21269.5	24905.1	20773.6
60°	16742.1	16449.3	15503.7	15205.7	15740.1	16868.1	19437.5	20568.1	22590.2	25976.6	21575.2
62.5°	16824.5	16582.9	15806.9	15804.4	16356.7	18106.5	21405.7	22251.0	23743.8	27035.2	22294.7
65°	15400.9	15249.3	14789.4	15781.2	17240.7	19889.7	23597.3	24404.1	25210.9	27960.2	22926.7
67.5°	11721.6	11742.2	11708.8	13623.0	16526.4	22451.4	26770.5	26708.8	27022.4	28998.2	23653.8
70°	5359.7	5480.6	6266.7	9404.0	13240.1	22746.9	32017.2	31218.2	29296.2	30342.0	24283.4
72.5°	2895.7	2988.2	3309.4	4555.5	7959.9	20223.8	35938.1	36506.0	32320.4	31246.4	23592.2
75°	2124.9	2176.3	2399.8	2895.7	3342.8	15031.0	34532.7	37446.4	32698.1	29137.0	20372.8
77.5°	1590.5	1613.6	1796.0	2294.5	1711.2	7924.1	27592.8	31012.6	27991.0	23939.1	15048.9
80°	1153.6	1179.4	1315.5	1721.5	1199.9	2898.3	18946.7	21767.9	19170.3	15259.7	7500.0
82.5°	796.5	806.8	865.9	1171.7	837.6	1125.3	10750.4	12764.7	10701.5	5354.6	2024.7
85°	480.5	493.3	519.1	683.5	475.3	534.4	4640.4	4799.7	3198.9	1279.6	629.5
87.5°	197.8	210.7	231.2	287.8	187.6	149.0	765.7	960.9	598.7	375.2	195.3
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°	8766.8	8766.8	8766.8	8766.8	8766.8	8766.8	8766.8	8766.8	8766.8	8766.8	8766.8
2.5°	8779.6	8761.6	8712.8	8646.0	8584.4	8507.3	8473.9	8445.6	8420.0	8371.1	8348.0
5°	8833.6	8784.8	8653.8	8484.1	8291.4	8080.8	7875.2	7733.9	7613.1	7523.2	7448.7
7.5°	8915.8	8823.3	8584.4	8237.5	7795.5	7343.3	6934.8	6644.5	6426.0	6346.4	6207.7
10°	9000.6	8890.1	8473.9	7862.4	7099.3	6403.0	5860.7	5562.8	5388.0	5331.5	5244.1
12.5°	9100.8	8938.9	8301.7	7340.7	6320.8	5557.7	5084.8	4910.2	4820.2	4789.3	4797.1
15°	9247.2	8980.0	8042.3	6688.1	5578.2	4940.9	4635.2	4514.4	4468.2	4465.6	4475.9
17.5°	9357.7	8987.7	7638.8	5989.3	5007.7	4568.4	4316.6	4270.4	4301.2	4347.4	4365.4
20°	9481.0	8918.4	7109.5	5352.0	4607.0	4242.1	4136.7	4167.5	4242.1	4308.9	4332.0
22.5°	9568.5	8792.4	6469.7	4856.1	4260.1	4054.5	4049.4	4113.6	4154.7	4188.2	4206.1
25°	9645.6	8579.2	5791.5	4439.9	3974.8	3941.4	3998.0	3977.4	3949.1	3977.4	3995.4
27.5°	9702.0	8242.6	5185.1	4075.1	3774.5	3864.4	3830.9	3784.7	3782.1	3797.5	3823.2
30°	9684.1	7793.0	4686.6	3728.2	3633.1	3720.4	3640.8	3633.1	3625.4	3633.1	3661.4
32.5°	9684.1	7281.7	4303.8	3489.2	3543.2	3509.8	3502.1	3484.1	3453.2	3450.7	3484.1
35°	9738.0	6770.3	3974.8	3360.8	3468.7	3389.1	3394.2	3350.5	3286.3	3255.4	3286.3
37.5°	9848.5	6359.3	3648.6	3299.1	3337.6	3335.0	3314.5	3240.0	3127.0	3029.3	3062.7
40°	10115.7	6238.5	3425.0	3270.9	3276.0	3306.9	3252.8	3108.9	2852.1	2692.8	2713.3
42.5°	10534.5	6441.5	3376.1	3201.5	3234.9	3265.8	3160.4	2826.3	2643.9	2548.9	2548.9
45°	11066.4	6796.1	3481.5	3101.2	3137.2	3191.2	2877.7	2718.4	2636.2	2638.8	2651.6
47.5°	11739.5	7168.6	3676.8	3013.9	2995.9	3026.7	2690.1	2592.5	2479.5	2507.8	2579.7
50°	12518.1	7546.4	3861.8	2895.7	2839.1	2739.0	2569.4	2476.9	2333.0	2266.2	2284.2
52.5°	13360.9	7911.2	3936.3	2751.8	2669.6	2554.0	2487.2	2374.1	2199.4	2089.0	2086.4
55°	14160.0	8242.6	3854.1	2579.7	2500.0	2410.1	2399.8	2330.4	2142.9	1988.7	1988.7
57.5°	14915.4	8520.1	3648.6	2405.0	2327.9	2274.0	2343.3	2309.8	2073.5	1875.6	1865.4
60°	15555.1	8710.2	3350.5	2227.6	2173.7	2145.4	2250.8	2240.5	1975.9	1754.9	1747.2
62.5°	16063.9	8784.8	3021.6	2058.1	2045.3	1993.8	2122.4	2122.4	1852.6	1636.7	1629.0
65°	16462.1	8712.8	2687.5	1891.1	1916.7	1839.7	1965.5	1950.2	1721.5	1531.4	1521.1
67.5°	16814.1	8476.4	2317.6	1726.6	1785.8	1688.1	1801.1	1765.2	1577.6	1426.0	1415.7
70°	16970.8	7926.6	1896.2	1562.2	1634.2	1539.0	1636.7	1569.9	1415.7	1312.9	1292.4
72.5°	15711.8	6588.0	1492.8	1390.0	1451.7	1374.6	1459.4	1382.3	1241.1	1194.7	1156.2
75°	12998.5	4943.5	1148.5	1202.4	1248.8	1189.6	1246.2	1189.6	1061.2	1094.6	999.5
77.5°	9439.9	3337.6	878.7	1004.6	1025.2	994.4	1043.1	979.0	863.4	855.6	817.0
80°	4694.3	1955.3	688.6	794.0	786.3	765.7	822.3	791.4	693.7	734.8	727.1
82.5°	1359.3	837.6	501.0	557.6	542.1	547.2	588.3	603.8	904.5	896.7	917.3
85°	426.5	328.9	300.6	310.9	295.5	303.2	346.9	688.6	637.2	372.6	403.4
87.5°	110.5	113.1	74.5	79.6	82.2	97.7	110.5	418.8	200.4	131.0	138.8
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)