

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: P968711

Luminaire Tested: **NAV-SB5C-727-U-SL2**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P968711  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5C-727-U-SL2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

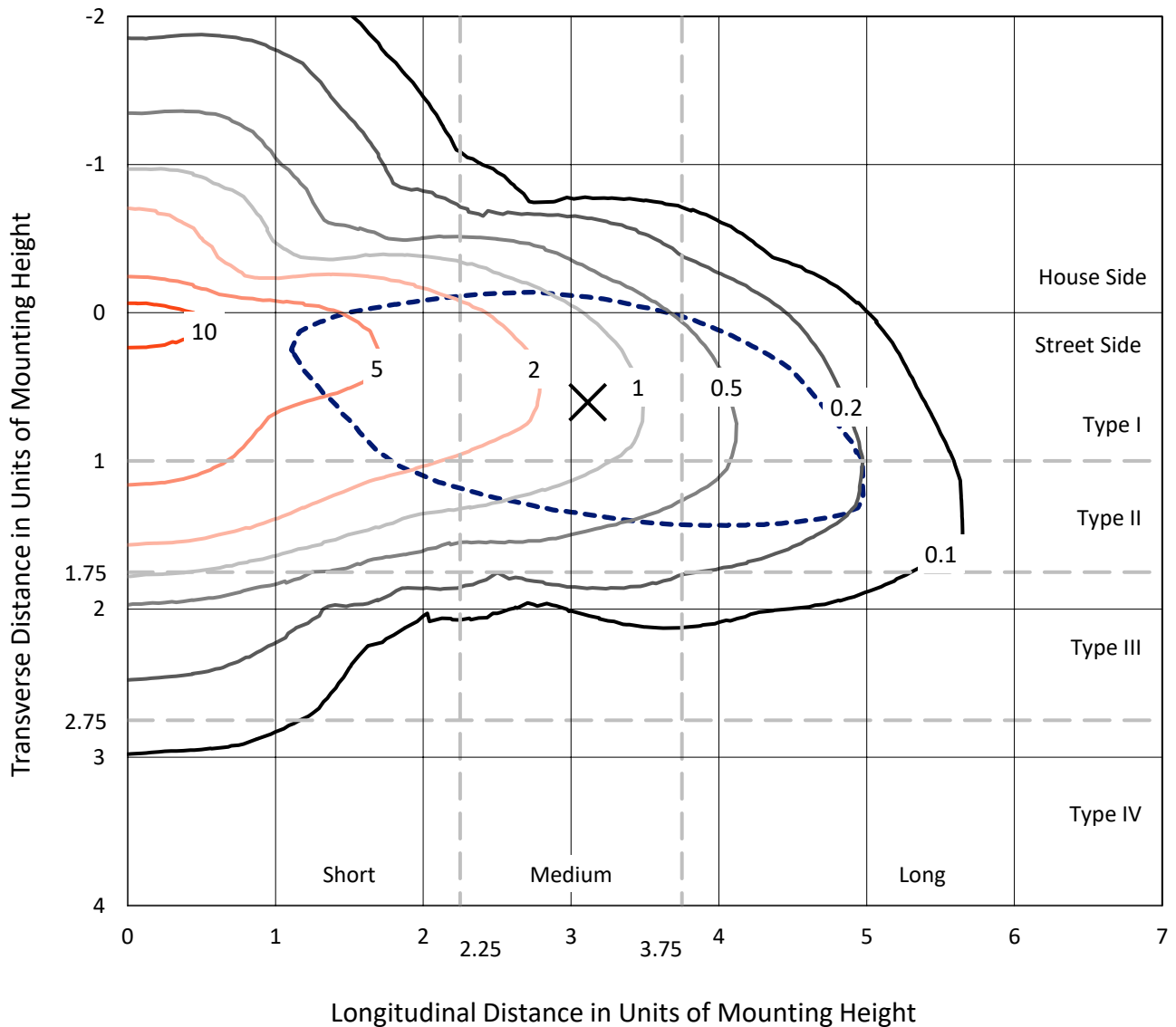
Lumens per Lamp: N/A  
Luminaire Lumens: 35748.9 lumens  
Efficiency: N/A  
Efficacy: 143.3 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 249.5  
Input Voltage (V): NR  
Input Current (Ain): 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

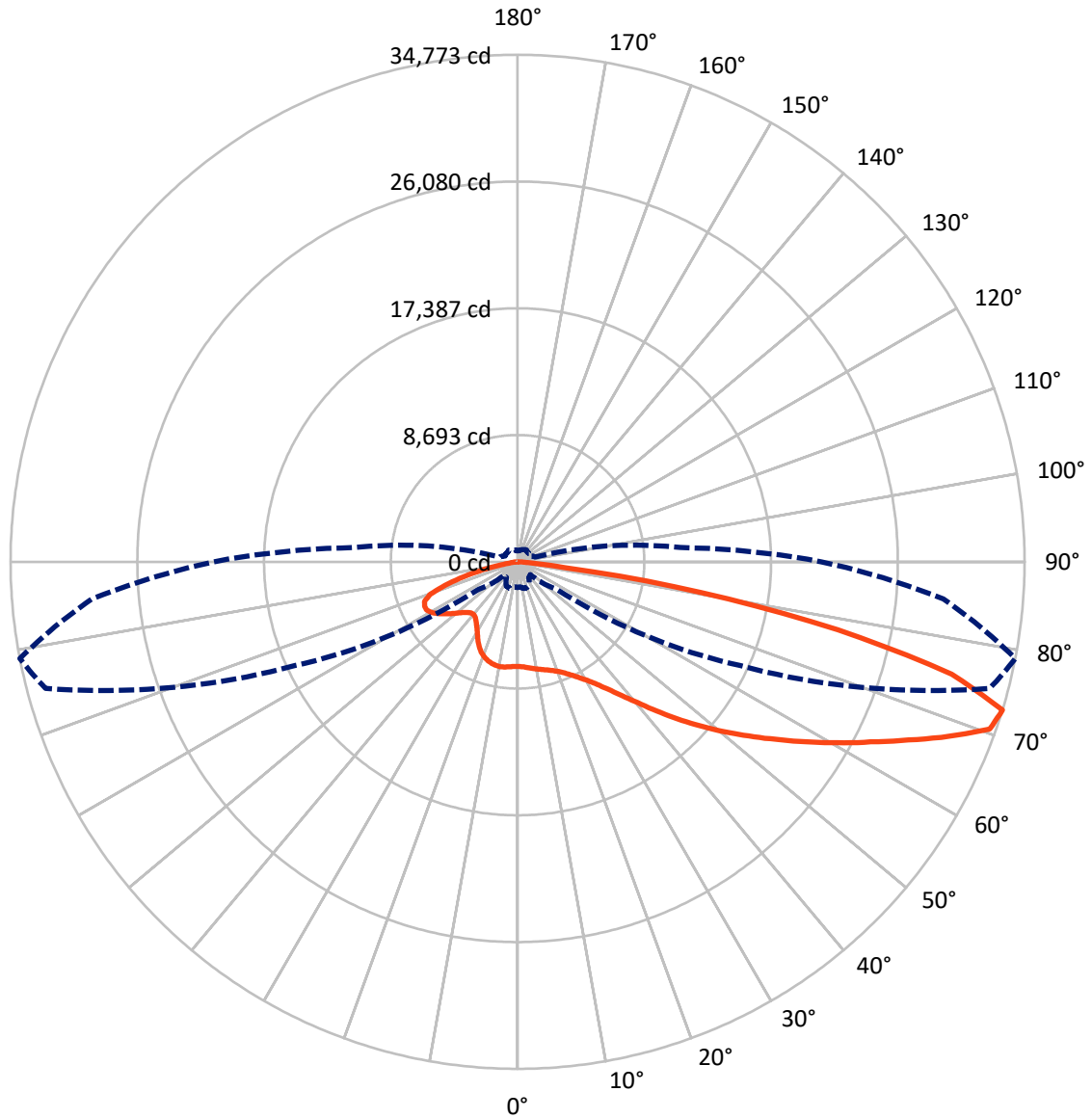
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.5 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7866.7	0.0	7866.7
	% Fixture	22.0	0.0	22.0
<b>Street Side</b>	Lumens	27882.2	0.0	27882.2
	% Fixture	78.0	0.0	78.0
<b>Total</b>	Lumens	35748.9	0.0	35748.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	651.4	1.8
10°-20°	1703.1	4.8
20°-30°	2748.1	7.7
30°-40°	4124.5	11.5
40°-50°	5850.8	16.4
50°-60°	7388.8	20.7
60°-70°	7504.3	21.0
70°-80°	5114.5	14.3
80°-90°	663.6	1.9
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°	35748.9	100.0
0°-180°	35748.9	100.0

**Coefficient of Utilization**

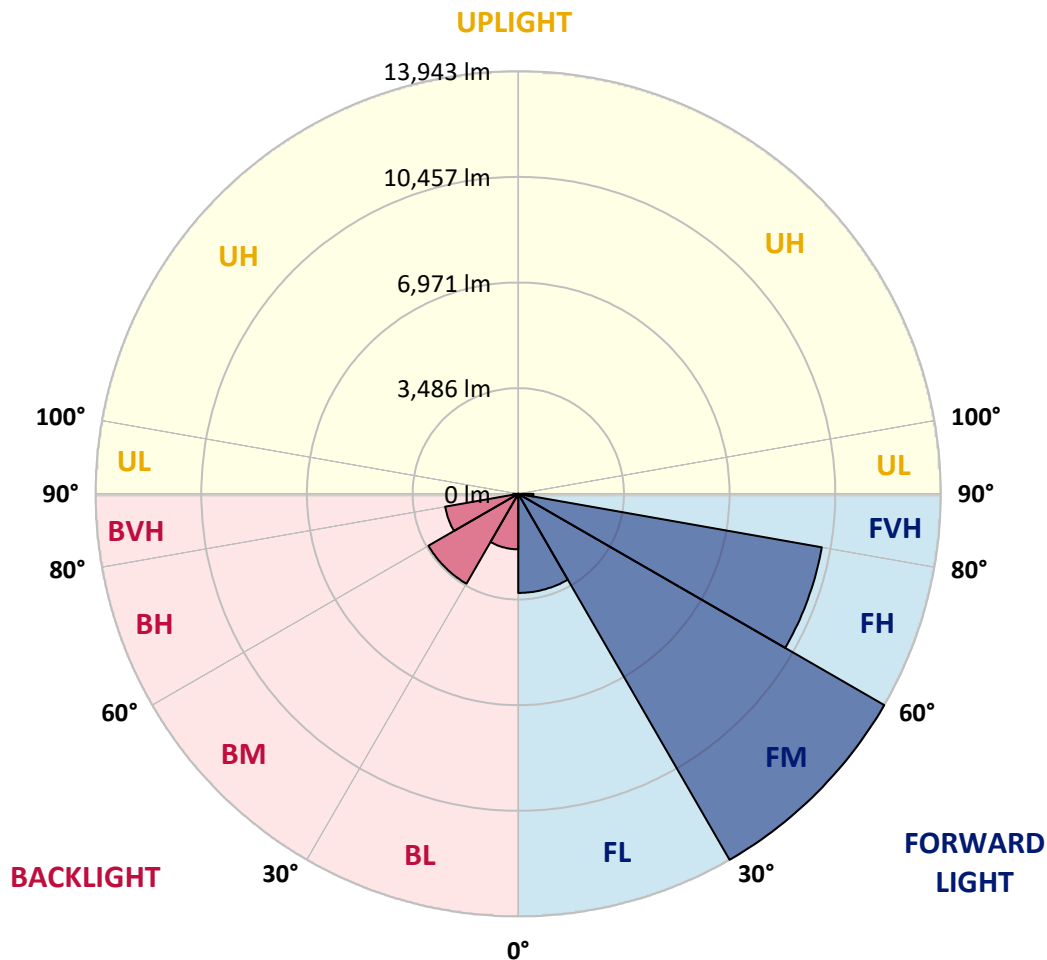


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3270.2	9.1			
FM (30°-60°)	13942.8	39.0			
FH (60°-80°)	10169.4	28.4			G4/12000
FVH (80°-90°)	499.9	1.4			G3/500
BL (0°-30°)	1832.4	5.1	B3/2500		
BM (30°-60°)	3421.2	9.6	B3/5000		
BH (60°-80°)	2449.4	6.9	B3/2500		G3/2500
BVH (80°-90°)	163.7	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°	79°	85°
0°	7176.2	7176.2	7176.2	7176.2	7176.2	7176.2	7176.2	7176.2	7176.2	7176.2	7176.2
2.5°	7180.0	7146.0	7166.8	7159.2	7168.6	7180.0	7183.8	7189.5	7208.4	7206.5	7204.6
5°	7165.0	7130.8	7159.2	7149.8	7174.4	7200.8	7223.5	7244.3	7274.6	7287.9	7268.9
7.5°	7132.8	7110.1	7138.4	7166.8	7212.2	7251.9	7284.1	7331.3	7374.8	7382.4	7395.6
10°	6945.6	6928.6	6994.7	7068.5	7193.2	7301.1	7371.0	7425.8	7473.2	7480.7	7499.6
12.5°	6750.8	6729.9	6803.7	6904.0	7106.3	7301.1	7448.6	7520.4	7562.0	7586.6	7614.9
15°	6718.7	6701.7	6743.3	6830.2	6998.5	7250.0	7501.5	7633.9	7669.8	7698.2	7709.5
17.5°	6873.6	6841.6	6858.6	6888.8	6987.1	7202.8	7543.1	7762.4	7817.3	7847.5	7847.5
20°	7233.0	7187.6	7161.2	7100.6	7083.6	7210.3	7539.3	7917.5	7989.4	8027.2	8036.6
22.5°	7711.4	7681.1	7624.5	7471.2	7304.9	7302.9	7611.1	8116.1	8250.3	8286.3	8263.6
25°	8290.0	8244.7	8172.8	7964.8	7645.3	7486.4	7732.2	8369.4	8594.5	8604.0	8537.7
27.5°	8955.6	8887.6	8789.3	8515.1	8084.0	7773.8	7917.5	8660.6	8989.7	8986.0	8849.7
30°	9657.2	9589.2	9485.1	9152.3	8609.6	8161.5	8174.7	8974.6	9458.7	9437.9	9205.3
32.5°	10169.6	10118.6	10097.8	9840.6	9214.8	8619.1	8469.7	9322.5	10037.3	10018.3	9693.1
35°	10563.0	10496.8	10521.4	10390.9	9874.6	9131.5	8830.9	9736.7	10740.8	10738.8	10334.2
37.5°	10952.5	10893.9	10914.7	10827.7	10485.4	9782.0	9271.4	10243.4	11612.5	11654.0	11109.5
40°	11308.0	11245.7	11328.8	11247.5	10960.1	10474.2	9772.6	10816.4	12622.3	12701.7	12047.4
42.5°	11521.7	11472.5	11610.6	11612.5	11372.4	11058.4	10322.9	11448.0	13790.9	13968.6	13200.9
45°	11595.5	11578.4	11786.5	11829.9	11737.3	11396.9	10818.3	12136.3	15050.3	15367.9	14515.1
47.5°	11516.1	11483.9	11771.3	11932.0	12005.8	11555.7	11228.7	12881.4	16336.1	16801.3	15948.5
50°	11115.2	11052.8	11480.1	11818.6	12081.5	11659.8	11642.8	13741.8	17797.9	18306.5	17389.4
52.5°	10394.7	10347.4	10833.4	11421.5	11915.0	11710.8	12107.9	14681.6	19185.8	19843.9	18866.3
55°	9473.8	9411.3	9946.5	10714.3	11500.9	11693.8	12573.1	15732.9	20823.4	21491.0	20392.3
57.5°	8014.0	7889.1	8566.1	9473.8	10825.8	11673.0	13057.2	16778.6	22487.5	23287.4	22020.4
60°	5884.7	5699.4	6529.6	7605.5	9506.0	11470.7	13656.6	17951.0	24484.4	25204.9	23797.9
62.5°	3426.5	3318.6	3861.4	4865.5	7165.0	10279.3	13993.2	19314.5	26447.2	27203.6	25545.3
65°	2660.6	2630.4	2677.6	2755.2	3988.1	7696.3	12955.1	20643.8	28943.3	29472.7	27366.2
67.5°	2433.7	2411.0	2431.8	2286.2	2023.4	4286.9	10249.1	20980.4	31617.2	31938.6	28960.4
70°	2163.3	2136.8	2204.9	2080.0	1592.2	1949.5	6622.2	19758.8	33744.4	34347.8	30172.4
72.5°	1762.4	1732.1	1891.0	1834.2	1340.7	1251.8	3326.2	16856.1	33521.4	34773.1	29304.4
75°	1353.9	1336.9	1526.0	1573.3	1093.0	985.2	1596.0	12529.6	29499.2	30760.6	25255.9
77.5°	1051.3	1038.1	1134.6	1306.7	881.2	763.9	981.4	7947.7	22230.3	22451.6	17404.5
80°	788.5	750.7	839.6	1011.7	686.4	557.8	665.6	4634.7	14051.8	12737.6	7575.3
82.5°	493.5	474.7	548.4	675.1	484.1	383.9	433.1	2560.3	5631.3	3316.8	1461.8
85°	281.8	274.2	298.8	385.8	262.8	221.2	247.7	1130.8	1028.7	707.2	440.6
87.5°	113.5	109.7	136.1	172.1	96.5	81.3	87.0	272.3	226.9	209.9	145.7
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°	7176.2	7176.2	7176.2	7176.2	7176.2	7176.2	7176.2	7176.2	7176.2	7176.2	7176.2
2.5°	7197.0	7197.0	7170.6	7129.0	7081.7	7051.5	7002.3	6989.1	6938.0	6922.8	6947.4
5°	7284.1	7268.9	7187.6	7070.3	6909.6	6762.1	6599.5	6497.4	6353.7	6302.6	6340.4
7.5°	7393.7	7352.1	7212.2	6955.0	6618.4	6287.5	5943.4	5682.4	5432.8	5343.9	5355.2
10°	7494.0	7435.4	7197.0	6747.0	6164.6	5591.6	5043.2	4659.3	4368.1	4249.0	4275.5
12.5°	7594.1	7486.4	7096.8	6400.9	5519.7	4742.6	4158.2	3859.4	3679.9	3536.1	3583.4
15°	7688.7	7537.4	6941.8	5937.6	4812.6	4024.0	3592.8	3354.6	3210.9	3116.3	3133.3
17.5°	7798.4	7580.9	6709.1	5349.6	4139.4	3526.7	3174.9	3031.2	3002.8	2991.6	2999.0
20°	7951.5	7620.7	6402.9	4691.5	3643.9	3129.5	2948.0	2934.8	2932.9	2927.2	2946.2
22.5°	8116.1	7667.9	5998.2	4094.0	3222.2	2881.9	2849.7	2823.3	2806.2	2804.3	2825.1
25°	8310.8	7683.0	5491.4	3604.2	2862.9	2764.6	2726.8	2687.0	2675.8	2675.8	2687.0
27.5°	8499.9	7631.9	4901.4	3178.7	2660.6	2656.8	2607.7	2594.4	2592.5	2598.2	2613.3
30°	8689.0	7535.5	4315.2	2785.4	2543.3	2543.3	2526.3	2535.8	2543.3	2562.3	2575.5
32.5°	8944.4	7433.4	3825.4	2494.2	2441.2	2422.4	2439.4	2458.3	2465.8	2490.4	2511.2
35°	9318.7	7361.6	3435.9	2335.4	2335.4	2310.8	2320.2	2316.4	2299.4	2288.1	2314.6
37.5°	9814.2	7357.8	3114.5	2261.6	2246.5	2242.7	2244.5	2220.0	2153.8	2074.4	2076.3
40°	10409.8	7459.9	2866.7	2210.5	2199.2	2221.9	2210.5	2144.4	1962.9	1824.8	1821.0
42.5°	11209.7	7751.2	2707.8	2148.2	2182.2	2210.5	2165.2	1936.3	1813.4	1720.8	1717.0
45°	12151.4	8223.9	2626.6	2082.0	2150.0	2184.1	1964.7	1864.5	1766.2	1654.6	1647.1
47.5°	13217.9	8819.5	2607.7	2019.6	2078.2	2099.0	1879.6	1834.2	1722.7	1601.7	1592.2
50°	14379.0	9524.8	2658.7	1945.9	1974.2	1902.3	1851.3	1809.6	1694.3	1575.2	1562.0
52.5°	15579.8	10302.1	2760.8	1845.6	1870.2	1790.8	1839.9	1804.0	1677.3	1516.6	1505.2
55°	16759.8	11084.9	2859.1	1728.4	1764.3	1690.5	1807.8	1781.3	1599.7	1418.2	1408.8
57.5°	17958.6	11864.0	2955.6	1624.3	1662.1	1594.1	1756.7	1720.8	1512.8	1327.5	1323.7
60°	19204.8	12620.4	3001.0	1524.2	1550.6	1505.2	1679.2	1616.8	1414.5	1234.8	1229.2
62.5°	20371.5	13250.1	2927.2	1423.9	1440.9	1422.0	1577.1	1493.8	1316.1	1130.8	1128.9
65°	21542.0	13624.5	2700.4	1325.5	1329.3	1319.9	1433.4	1361.5	1200.8	1040.1	1028.7
67.5°	22602.9	13834.4	2339.2	1219.6	1210.2	1206.4	1299.1	1217.8	1089.2	949.3	937.9
70°	22827.9	13301.1	1787.0	1094.9	1094.9	1085.4	1151.6	1068.4	966.3	852.8	849.0
72.5°	20849.9	11188.9	1268.8	953.0	968.2	949.3	1004.1	934.2	841.5	765.9	743.1
75°	16812.7	8204.9	922.8	807.5	833.9	801.8	852.8	803.7	724.3	722.3	650.5
77.5°	11552.0	5073.4	669.4	665.6	684.5	643.0	701.5	675.1	603.2	571.0	535.2
80°	4929.7	2023.4	487.9	514.3	514.3	476.5	544.6	552.2	489.7	474.7	474.7
82.5°	981.4	574.8	342.2	353.6	332.8	321.4	385.8	427.3	590.0	656.2	658.0
85°	295.0	211.8	206.1	192.9	170.1	172.1	226.9	429.3	529.5	302.6	261.0
87.5°	81.3	53.0	54.8	43.5	36.0	47.3	77.5	325.2	177.7	75.6	64.3
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)