

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: P965688

Luminaire Tested: **NAV-SB4A-750-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965688
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4A-750-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 5000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19317.1 lumens
Efficiency: N/A
Efficacy: 169.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 114
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



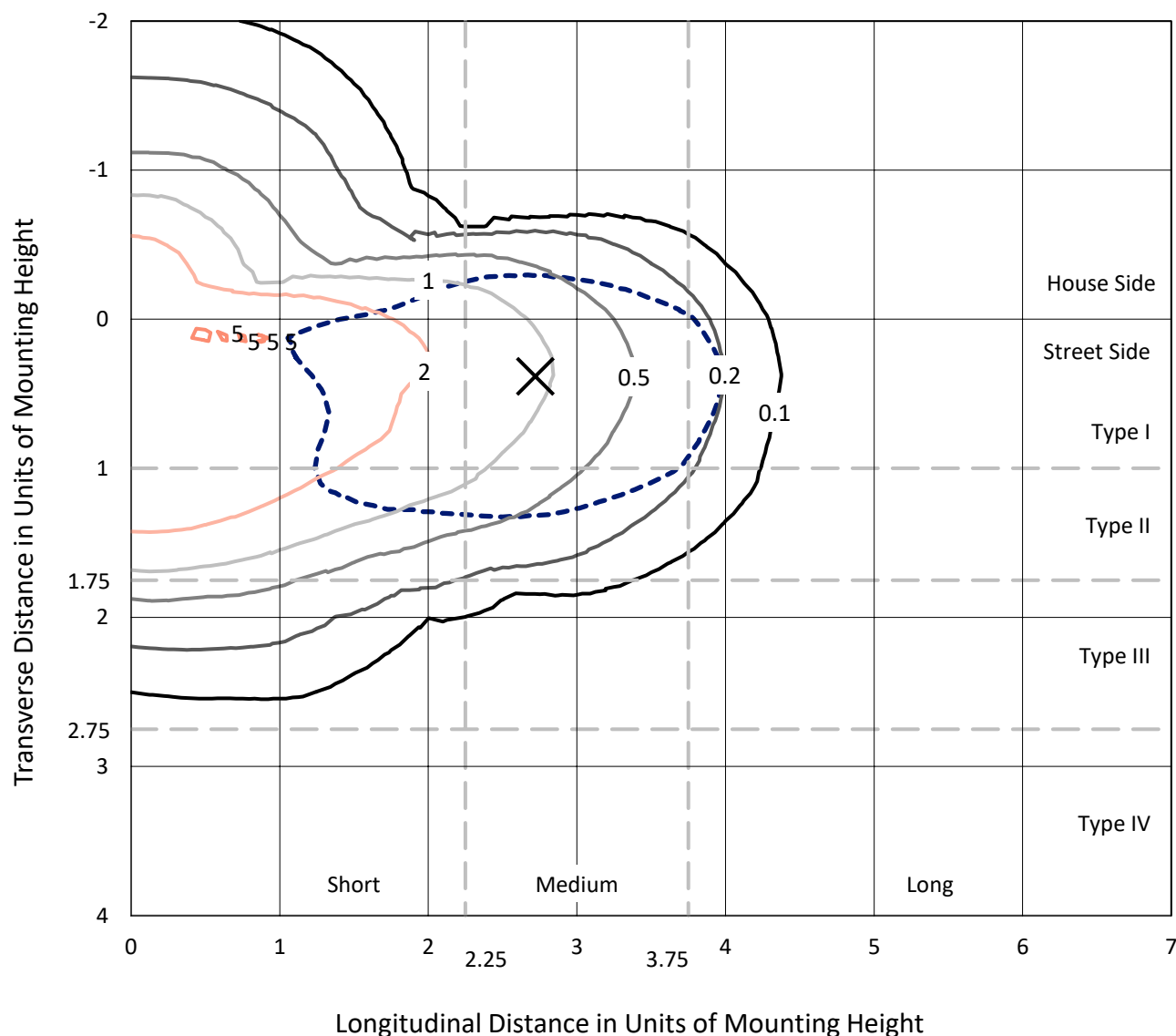
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

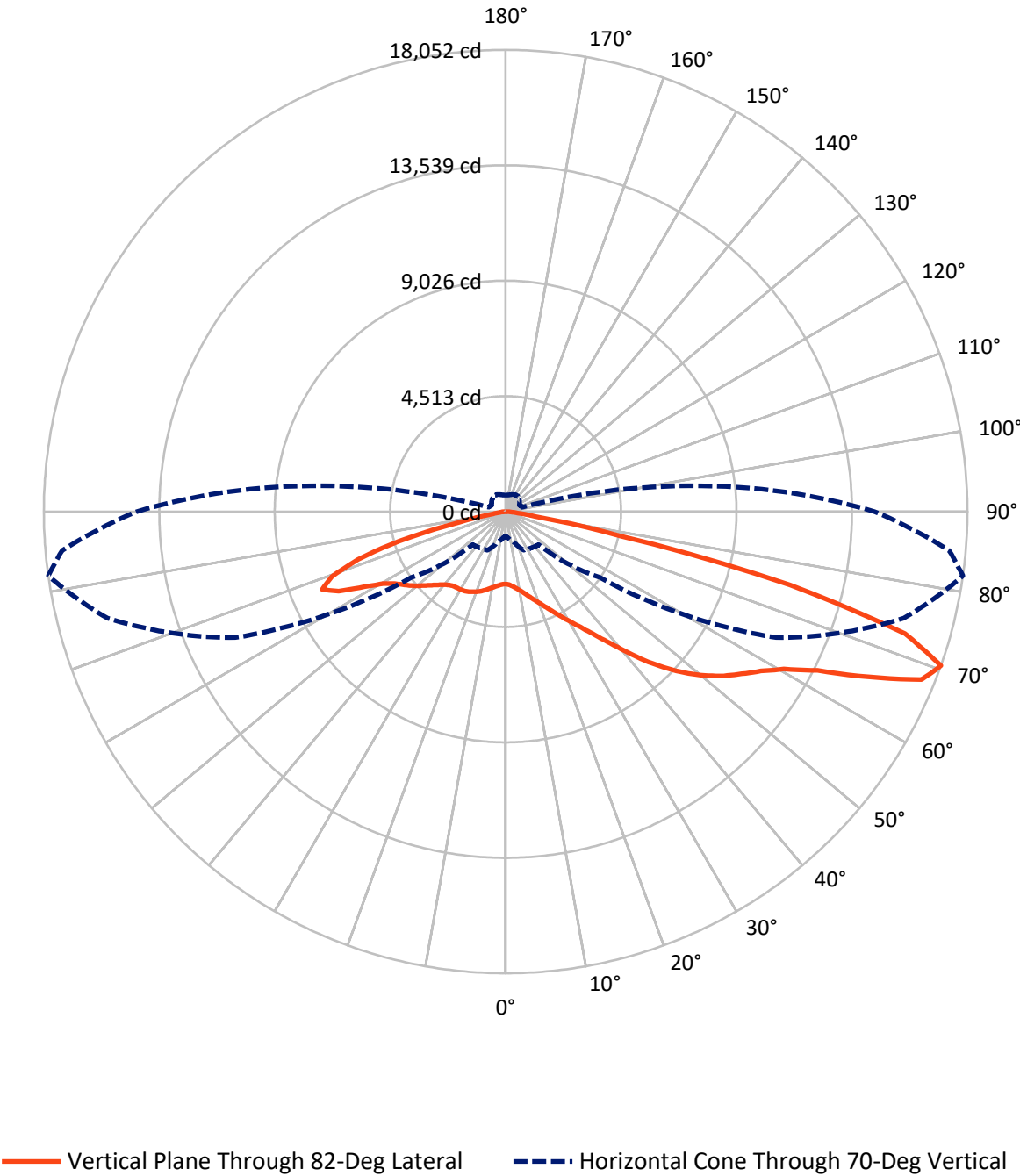
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 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	4762.1	0.0	4762.1
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	14555.0	0.0	14555.0
	% Fixture	75.3	0.0	75.3
Total	Lumens	19317.1	0.0	19317.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	267.4	1.4
10°-20°	768.3	4.0
20°-30°	1285.2	6.7
30°-40°	2007.9	10.4
40°-50°	3197.7	16.6
50°-60°	4450.1	23.0
60°-70°	4655.0	24.1
70°-80°	2432.9	12.6
80°-90°	252.6	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°	19317.1	100.0
0°-180°	19317.1	100.0

Coefficient of Utilization



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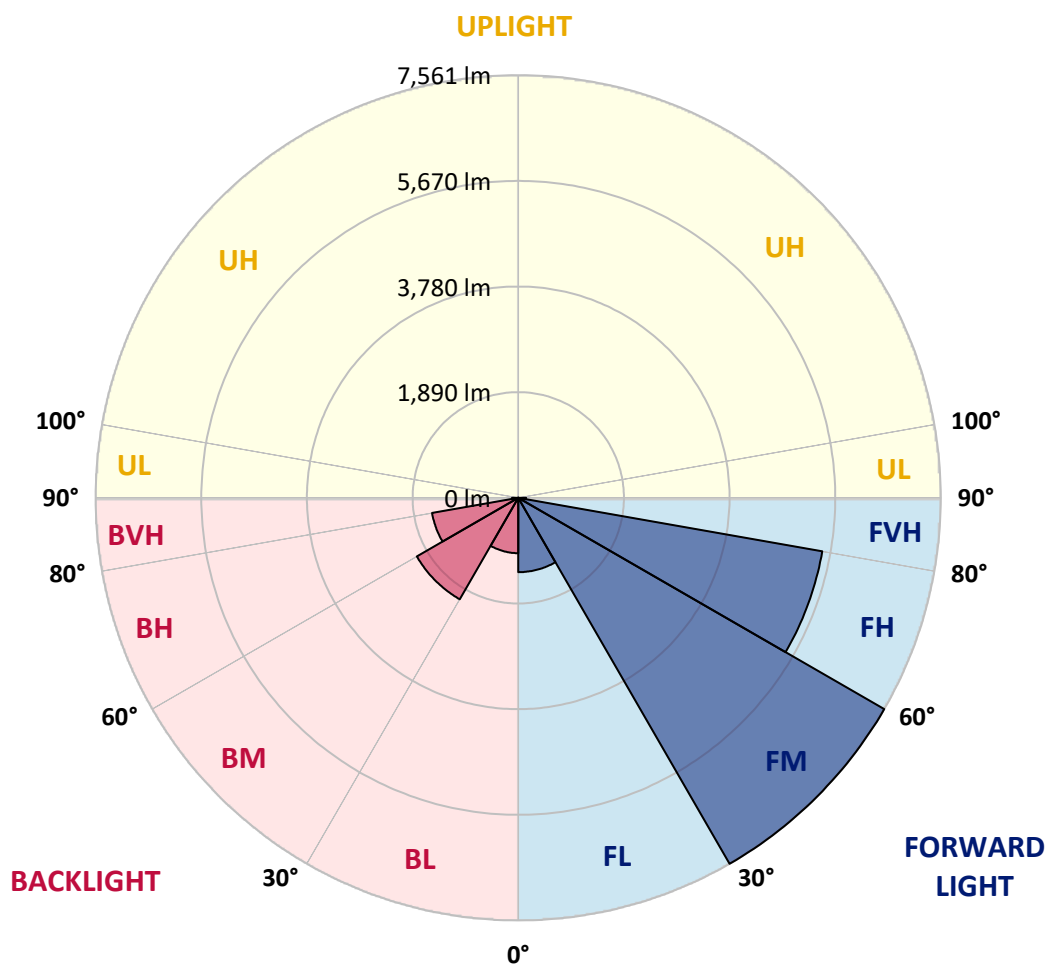
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1330.2	6.9			
FM	(30°-60°)	7560.5	39.1			
FH	(60°-80°)	5522.8	28.6			G3/7500
FVH	(80°-90°)	141.4	0.7			G2/225
BL	(0°-30°)	990.7	5.1	B2/1000		
BM	(30°-60°)	2095.1	10.8	B2/2500		
BH	(60°-80°)	1565.1	8.1	B3/2500		G3/2500
BVH	(80°-90°)	111.2	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2832.2	2832.2	2832.2	2832.2	2832.2	2832.2	2832.2	2832.2	2832.2	2832.2	2832.2
2.5°	2899.8	2916.2	2911.1	2906.0	2906.0	2898.8	2897.8	2887.5	2879.3	2866.0	2862.9
5°	2936.7	2954.2	2952.1	2956.2	2969.5	2972.6	2975.7	2969.5	2953.1	2936.7	2929.6
7.5°	2903.9	2923.4	2929.6	2954.2	2995.2	3032.1	3059.7	3071.0	3055.6	3032.1	3020.8
10°	2793.2	2814.8	2836.3	2894.7	2967.5	3054.6	3128.4	3172.5	3169.4	3146.9	3127.4
12.5°	2568.8	2591.3	2637.4	2751.2	2884.5	3038.2	3175.6	3267.8	3299.6	3283.2	3249.4
15°	2389.3	2408.9	2443.7	2560.6	2733.8	2967.5	3193.0	3372.4	3453.3	3444.1	3403.1
17.5°	2384.1	2392.5	2414.0	2469.3	2602.6	2856.8	3174.5	3474.9	3629.6	3628.6	3577.4
20°	2474.5	2477.5	2489.8	2501.1	2577.0	2772.7	3127.4	3559.9	3827.5	3827.5	3772.1
22.5°	2599.5	2597.5	2609.8	2599.5	2636.4	2765.6	3097.7	3634.8	4047.8	4064.2	3994.5
25°	2787.1	2776.8	2773.8	2750.2	2757.4	2832.2	3130.5	3719.8	4309.2	4343.0	4255.9
27.5°	3037.2	3020.8	3009.5	2955.2	2936.7	2969.5	3230.9	3822.3	4600.3	4658.7	4548.0
30°	3363.1	3333.4	3317.0	3222.7	3156.1	3161.2	3382.6	3958.7	4904.7	4999.0	4858.6
32.5°	3808.0	3761.9	3717.8	3563.0	3441.0	3401.1	3578.4	4147.3	5234.8	5385.5	5205.1
35°	4306.1	4269.2	4222.1	3983.3	3795.7	3703.4	3842.8	4410.7	5621.2	5860.0	5625.3
37.5°	4785.8	4754.1	4776.6	4454.8	4212.9	4078.6	4189.3	4764.3	6097.8	6450.4	6152.2
40°	5281.9	5257.3	5260.4	4952.9	4671.0	4520.4	4609.5	5208.1	6644.2	7152.6	6785.6
42.5°	5821.1	5802.6	5741.1	5468.5	5151.8	5011.3	5093.3	5720.6	7230.6	7952.2	7480.7
45°	6424.8	6413.5	6356.1	6043.5	5680.7	5522.8	5633.5	6286.4	7819.9	8704.5	8178.7
47.5°	6946.5	6955.8	6948.6	6685.2	6309.0	6077.3	6209.6	6876.8	8368.3	9411.8	8848.0
50°	7197.8	7245.9	7316.7	7234.7	7000.9	6765.1	6790.7	7446.8	8891.1	10074.9	9489.7
52.5°	7066.5	7157.7	7350.5	7481.7	7571.9	7522.7	7454.0	8012.6	9383.1	10673.5	10096.5
55°	6577.5	6705.7	7025.5	7342.3	7802.5	8160.2	8250.4	8639.9	9862.8	11200.4	10670.5
57.5°	5686.8	5894.9	6181.9	6822.5	7597.5	8468.8	9179.1	9510.2	10371.2	11763.1	11271.1
60°	4159.6	4438.4	4795.1	5748.3	6879.9	8303.7	9969.4	10846.8	11093.8	12492.0	12053.3
62.5°	2662.0	2834.2	3162.2	4060.1	5360.9	7458.1	10211.3	12517.6	12318.8	13687.1	13225.9
65°	1822.4	1933.2	2233.5	2737.9	3465.6	5551.5	9563.5	13770.2	14264.2	15581.3	15230.8
67.5°	1324.3	1408.4	1664.6	2106.4	2258.1	3285.2	7421.2	13712.8	16155.3	17533.0	16987.7
70°	965.6	1025.0	1240.2	1664.6	1737.4	1827.6	4495.8	11656.5	16114.3	18051.7	17398.8
72.5°	715.4	756.4	901.0	1291.5	1406.3	1234.1	2225.3	8471.8	13847.0	16327.5	15803.8
75°	517.6	548.4	655.0	988.1	1125.4	939.9	1110.1	4950.9	9658.8	11485.3	11577.6
77.5°	395.6	419.2	488.9	723.6	901.0	705.2	688.8	2277.5	4579.8	4602.4	4860.7
80°	317.8	333.1	371.0	509.4	690.8	527.9	449.0	919.4	1447.3	1224.9	1285.4
82.5°	233.7	259.3	313.6	357.7	494.0	363.9	273.7	464.3	550.4	473.6	477.6
85°	133.2	150.7	189.6	256.2	315.7	222.4	156.8	206.0	256.2	210.1	187.6
87.5°	47.2	61.5	66.6	100.4	137.4	92.2	60.5	59.4	84.0	62.5	52.3
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°	2832.2	2832.2	2832.2	2832.2	2832.2	2832.2	2832.2	2832.2	2832.2	2832.2	2832.2
2.5°	2852.7	2847.6	2827.1	2799.4	2770.7	2743.0	2733.8	2714.3	2701.0	2693.8	2702.0
5°	2910.1	2893.7	2845.5	2784.0	2719.4	2649.7	2600.5	2555.4	2522.6	2491.9	2504.2
7.5°	2992.1	2963.4	2880.4	2772.7	2657.9	2542.1	2456.0	2390.4	2346.2	2317.5	2323.7
10°	3087.4	3043.3	2916.2	2755.3	2578.0	2411.9	2310.4	2254.0	2226.3	2210.9	2215.0
12.5°	3197.1	3134.6	2953.1	2715.3	2456.0	2266.3	2196.6	2180.2	2181.2	2182.2	2184.3
15°	3332.4	3245.3	2982.9	2628.2	2297.0	2154.5	2142.2	2168.9	2196.6	2209.9	2208.9
17.5°	3485.1	3362.1	2988.0	2484.7	2141.2	2082.8	2121.8	2179.1	2221.2	2239.6	2243.7
20°	3649.1	3481.0	2951.1	2281.6	2013.1	2024.4	2094.1	2167.9	2214.0	2237.6	2243.7
22.5°	3836.7	3608.1	2862.9	2068.4	1908.5	1960.8	2042.8	2114.6	2162.8	2186.3	2192.5
25°	4050.9	3750.6	2724.6	1889.1	1818.4	1889.1	1971.1	2030.5	2069.5	2091.0	2097.1
27.5°	4288.7	3899.2	2540.1	1746.6	1739.4	1815.3	1882.9	1929.0	1949.5	1966.0	1972.1
30°	4527.5	4034.5	2316.5	1639.0	1670.7	1742.5	1790.7	1811.2	1817.3	1820.4	1827.6
32.5°	4785.8	4151.4	2081.8	1549.8	1605.1	1671.8	1700.5	1709.7	1681.0	1661.5	1667.7
35°	5098.5	4276.4	1852.2	1479.1	1540.6	1598.0	1607.2	1599.0	1565.2	1525.2	1527.2
37.5°	5484.9	4432.2	1668.7	1428.8	1480.1	1518.0	1506.7	1504.7	1507.8	1460.6	1463.7
40°	5958.4	4635.2	1534.4	1389.9	1430.9	1439.1	1407.3	1424.7	1440.1	1368.4	1370.4
42.5°	6484.3	4880.1	1449.4	1363.2	1389.9	1370.4	1321.2	1340.7	1338.6	1244.4	1243.3
45°	7020.3	5146.6	1419.6	1343.8	1352.0	1313.0	1258.7	1263.8	1220.8	1135.7	1138.8
47.5°	7553.4	5432.6	1438.1	1327.4	1304.8	1260.8	1218.7	1196.2	1132.6	1069.1	1069.1
50°	8076.2	5732.9	1505.7	1294.6	1240.2	1214.6	1183.9	1143.9	1076.2	1021.9	1017.8
52.5°	8561.0	6035.3	1581.6	1240.2	1159.3	1174.6	1155.2	1109.0	1042.4	987.1	988.1
55°	9020.2	6337.7	1611.3	1165.4	1083.4	1139.8	1128.5	1043.4	963.5	918.4	914.3
57.5°	9520.4	6701.6	1578.5	1070.1	1021.9	1099.8	1056.8	962.5	916.4	882.5	879.4
60°	10213.3	7272.6	1507.8	952.2	963.5	1040.4	966.6	927.6	877.4	839.5	837.4
62.5°	11364.4	8337.6	1394.0	835.4	894.8	952.2	923.5	884.6	833.3	796.4	796.4
65°	13066.0	9817.7	1179.8	744.2	817.9	866.1	877.4	838.4	785.2	746.2	748.2
67.5°	14501.0	10746.3	892.8	668.3	739.0	796.4	828.2	790.3	733.9	696.0	697.0
70°	14422.1	10071.9	681.6	593.5	669.3	727.7	768.7	739.0	678.6	642.7	645.8
72.5°	12809.7	8425.7	551.4	517.6	598.6	656.0	705.2	682.6	621.2	586.3	586.3
75°	9410.7	5981.0	440.7	440.7	510.4	581.2	635.5	621.2	564.8	540.2	533.0
77.5°	3966.9	2509.3	345.4	365.9	424.4	499.2	566.8	571.9	522.8	553.5	502.2
80°	1054.7	691.9	263.4	288.0	333.1	412.0	493.0	491.0	437.7	409.0	380.3
82.5°	401.8	272.6	187.6	203.0	240.9	315.7	390.5	402.8	349.5	302.4	302.4
85°	154.8	116.8	115.8	122.0	140.4	209.1	295.2	305.4	263.4	223.4	230.6
87.5°	40.0	34.8	43.0	41.0	64.6	111.7	169.1	175.3	160.9	93.3	133.2
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)