

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: P962898

Luminaire Tested: **NAV-SB2D-722-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962898
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-SB2D-722-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17073.4 lumens
Efficiency: N/A
Efficacy: 115.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

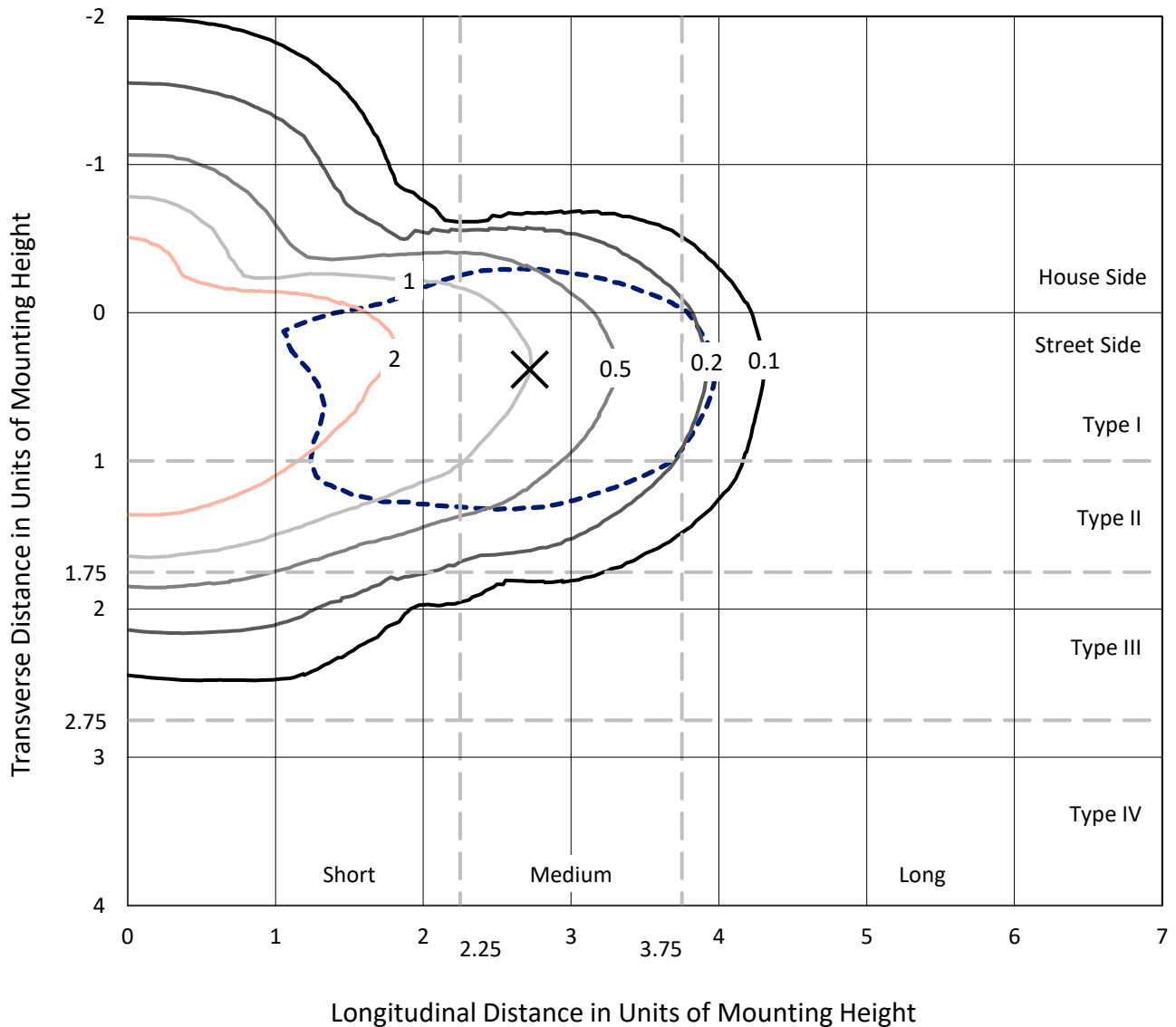
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

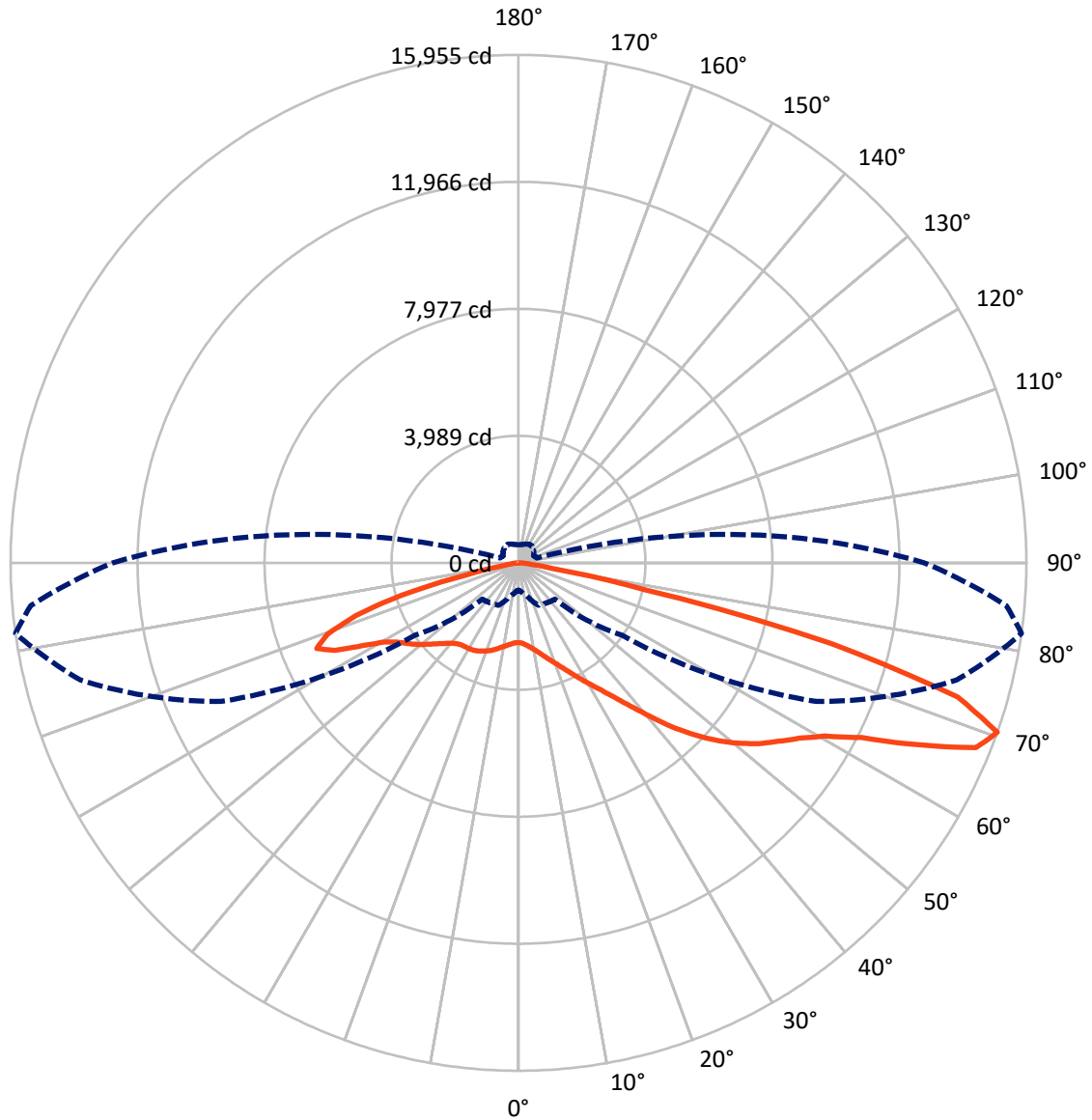
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4209.0	0.0	4209.0
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	12864.4	0.0	12864.4
	% Fixture	75.3	0.0	75.3
Total	Lumens	17073.4	0.0	17073.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.3	1.4
10°-20°	679.0	4.0
20°-30°	1135.9	6.7
30°-40°	1774.6	10.4
40°-50°	2826.3	16.6
50°-60°	3933.2	23.0
60°-70°	4114.3	24.1
70°-80°	2150.4	12.6
80°-90°	223.3	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°	17073.4	100.0
0°-180°	17073.4	100.0

Coefficient of Utilization

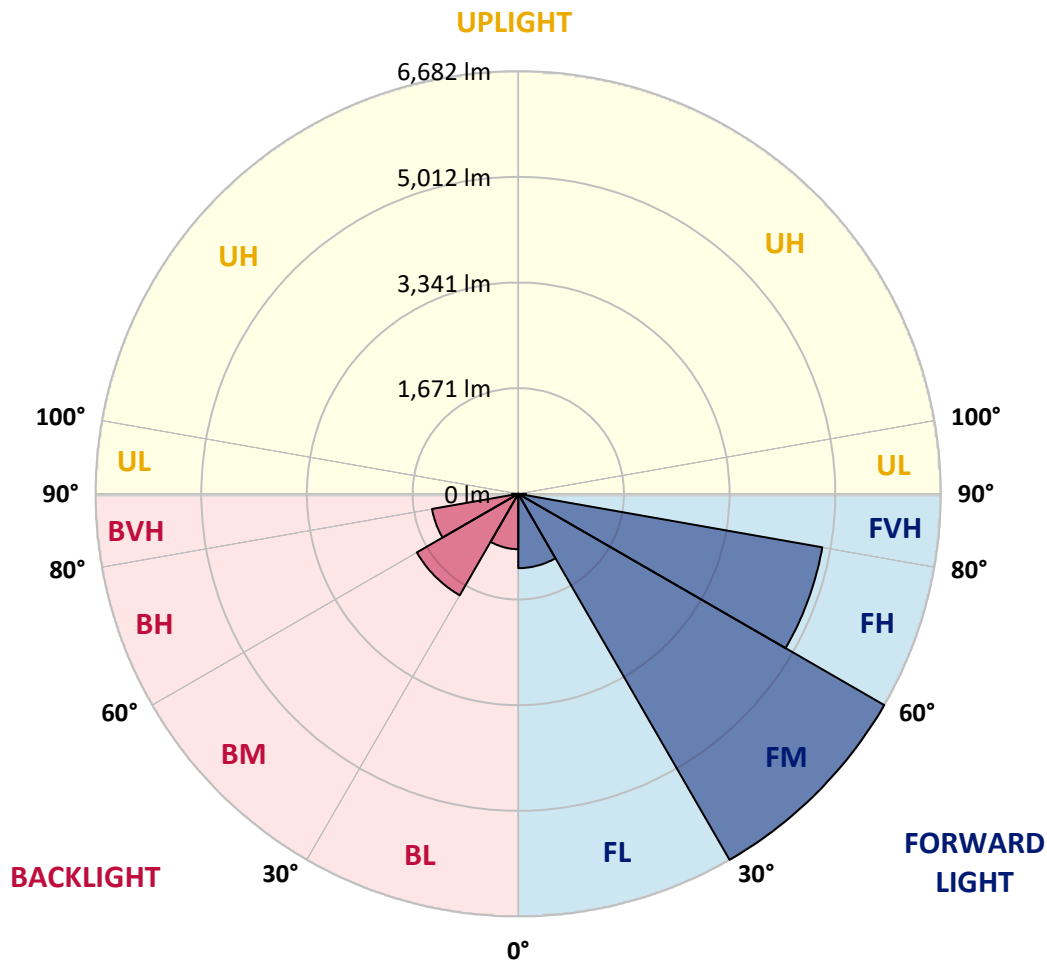


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1175.7	6.9			
FM (30°-60°)	6682.4	39.1			
FH (60°-80°)	4881.3	28.6			G2/5000
FVH (80°-90°)	125.0	0.7			G2/225
BL (0°-30°)	875.6	5.1	B2/1000		
BM (30°-60°)	1851.8	10.8	B2/2500		
BH (60°-80°)	1383.3	8.1	B3/2500		G3/2500
BVH (80°-90°)	98.3	0.6			G1/100
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°	2503.2	2503.2	2503.2	2503.2	2503.2	2503.2	2503.2	2503.2	2503.2	2503.2	2503.2
2.5°	2563.0	2577.5	2573.0	2568.4	2568.4	2562.1	2561.2	2552.1	2544.9	2533.1	2530.3
5°	2595.6	2611.0	2609.1	2612.8	2624.6	2627.3	2630.0	2624.6	2610.1	2595.6	2589.3
7.5°	2566.6	2583.8	2589.3	2611.0	2647.3	2679.9	2704.3	2714.3	2700.7	2679.9	2669.9
10°	2468.7	2487.8	2506.8	2558.4	2622.8	2699.7	2765.0	2804.0	2801.2	2781.3	2764.1
12.5°	2270.4	2290.3	2331.1	2431.6	2549.4	2685.3	2806.7	2888.2	2916.3	2901.8	2871.9
15°	2111.8	2129.0	2159.8	2263.1	2416.2	2622.8	2822.0	2980.6	3052.1	3044.0	3007.8
17.5°	2107.3	2114.5	2133.5	2182.4	2300.2	2524.9	2805.7	3071.2	3208.0	3207.1	3161.8
20°	2187.0	2189.7	2200.6	2210.5	2277.5	2450.7	2764.1	3146.4	3382.9	3382.9	3333.9
22.5°	2297.5	2295.7	2306.6	2297.5	2330.1	2444.3	2737.8	3212.6	3577.7	3592.1	3530.5
25°	2463.3	2454.3	2451.5	2430.7	2437.0	2503.2	2766.8	3287.8	3808.7	3838.5	3761.5
27.5°	2684.4	2669.9	2659.9	2611.9	2595.6	2624.6	2855.5	3378.3	4066.0	4117.6	4019.7
30°	2972.5	2946.2	2931.7	2848.4	2789.4	2793.9	2989.7	3498.8	4335.0	4418.4	4294.2
32.5°	3365.7	3324.9	3285.9	3149.1	3041.3	3006.0	3162.7	3665.5	4626.7	4759.9	4600.5
35°	3805.9	3773.3	3731.6	3520.6	3354.8	3273.2	3396.4	3898.4	4968.3	5179.4	4972.0
37.5°	4230.0	4201.9	4221.8	3937.3	3723.5	3604.8	3702.7	4210.9	5389.6	5701.3	5437.6
40°	4668.5	4646.7	4649.4	4377.6	4128.5	3995.3	4074.1	4603.2	5872.4	6321.8	5997.5
42.5°	5145.0	5128.7	5074.3	4833.3	4553.4	4429.2	4501.7	5056.2	6390.7	7028.4	6611.8
45°	5678.6	5668.7	5617.9	5341.6	5020.9	4881.4	4979.1	5556.3	6911.6	7693.4	7228.7
47.5°	6139.7	6147.8	6141.5	5908.7	5576.2	5371.4	5488.4	6078.1	7396.3	8318.6	7820.2
50°	6361.7	6404.3	6466.7	6394.3	6187.7	5979.3	6002.0	6581.8	7858.4	8904.7	8387.4
52.5°	6245.7	6326.3	6496.7	6612.6	6692.3	6648.9	6588.2	7081.9	8293.2	9433.8	8923.8
55°	5813.6	5926.9	6209.4	6489.4	6896.2	7212.4	7292.1	7636.4	8717.2	9899.4	9431.1
57.5°	5026.3	5210.2	5463.9	6030.1	6715.0	7485.1	8112.9	8405.5	9166.6	10396.9	9962.0
60°	3676.4	3922.8	4238.1	5080.6	6080.8	7339.2	8811.4	9586.9	9805.3	11041.0	10653.2
62.5°	2352.8	2505.0	2794.9	3588.5	4738.2	6591.8	9025.2	11063.6	10887.9	12097.4	11689.6
65°	1610.8	1708.7	1974.0	2419.8	3063.1	4906.7	8452.7	12170.7	12607.4	13771.6	13461.7
67.5°	1170.6	1244.8	1471.3	1861.7	1995.9	2903.6	6559.2	12120.0	14278.9	15496.5	15014.5
70°	853.4	906.0	1096.2	1471.3	1535.7	1615.3	3973.5	10302.6	14242.7	15954.9	15377.9
72.5°	632.3	668.6	796.3	1141.5	1243.0	1090.8	1966.9	7487.8	12238.7	14431.1	13968.2
75°	457.6	484.7	578.9	873.3	994.8	830.8	981.1	4375.8	8536.9	10151.3	10232.9
77.5°	349.7	370.5	432.1	639.6	796.3	623.3	608.8	2013.1	4047.8	4067.8	4296.1
80°	280.8	294.5	328.0	450.3	610.6	466.6	396.8	812.6	1279.2	1082.6	1136.1
82.5°	206.5	229.2	277.3	316.2	436.6	321.6	241.9	410.4	486.5	418.5	422.2
85°	117.8	133.1	167.6	226.5	279.0	196.6	138.6	182.1	226.5	185.7	165.7
87.5°	41.7	54.3	58.9	88.8	121.4	81.5	53.4	52.6	74.3	55.2	46.2
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°	2503.2	2503.2	2503.2	2503.2	2503.2	2503.2	2503.2	2503.2	2503.2	2503.2	2503.2
2.5°	2521.3	2516.8	2498.6	2474.1	2448.8	2424.3	2416.2	2399.0	2387.2	2380.9	2388.1
5°	2572.0	2557.6	2514.9	2460.6	2403.5	2341.9	2298.5	2258.6	2229.6	2202.4	2213.3
7.5°	2644.5	2619.2	2545.8	2450.7	2349.2	2246.8	2170.6	2112.7	2073.8	2048.4	2053.8
10°	2728.8	2689.8	2577.5	2435.2	2278.5	2131.7	2042.0	1992.2	1967.8	1954.2	1957.7
12.5°	2825.7	2770.5	2610.1	2399.9	2170.6	2003.1	1941.5	1927.0	1927.9	1928.8	1930.6
15°	2945.3	2868.3	2636.4	2322.9	2030.2	1904.3	1893.5	1917.1	1941.5	1953.2	1952.3
17.5°	3080.2	2971.6	2640.9	2196.1	1892.6	1840.9	1875.3	1926.1	1963.2	1979.5	1983.2
20°	3225.3	3076.6	2608.3	2016.7	1779.3	1789.2	1850.8	1916.1	1956.9	1977.7	1983.2
22.5°	3391.0	3189.0	2530.3	1828.2	1686.9	1733.1	1805.5	1869.0	1911.6	1932.4	1937.9
25°	3580.3	3315.0	2408.0	1669.7	1607.2	1669.7	1742.2	1794.7	1829.1	1848.2	1853.6
27.5°	3790.6	3446.3	2245.0	1543.8	1537.4	1604.4	1664.3	1705.0	1723.1	1737.7	1743.1
30°	4001.6	3565.9	2047.4	1448.6	1476.7	1540.2	1582.7	1600.8	1606.3	1608.9	1615.3
32.5°	4230.0	3669.2	1840.0	1369.8	1418.7	1477.6	1503.0	1511.2	1485.7	1468.5	1474.1
35°	4506.3	3779.7	1637.0	1307.3	1361.7	1412.3	1420.5	1413.3	1383.4	1348.1	1349.9
37.5°	4847.8	3917.3	1474.9	1262.9	1308.2	1341.7	1331.8	1329.9	1332.7	1291.0	1293.8
40°	5266.3	4096.7	1356.2	1228.5	1264.7	1271.9	1243.8	1259.3	1272.8	1209.5	1211.2
42.5°	5731.1	4313.3	1281.0	1204.9	1228.5	1211.2	1167.8	1185.0	1183.2	1099.8	1098.9
45°	6204.9	4548.8	1254.8	1187.7	1194.9	1160.5	1112.5	1117.0	1079.0	1003.8	1006.6
47.5°	6676.0	4801.6	1271.1	1173.2	1153.3	1114.4	1077.2	1057.3	1001.1	944.9	944.9
50°	7138.1	5067.1	1330.9	1144.2	1096.2	1073.6	1046.4	1011.1	951.3	903.2	899.6
52.5°	7566.7	5334.3	1397.9	1096.2	1024.7	1038.2	1021.0	980.2	921.4	872.5	873.3
55°	7972.4	5601.5	1424.1	1030.1	957.6	1007.5	997.4	922.3	851.6	811.7	808.1
57.5°	8414.6	5923.2	1395.2	945.9	903.2	972.1	934.1	850.7	810.0	780.0	777.4
60°	9027.1	6427.8	1332.7	841.6	851.6	919.5	854.3	819.9	775.5	742.0	740.2
62.5°	10044.4	7369.1	1232.2	738.4	790.9	841.6	816.3	781.9	736.6	704.0	704.0
65°	11548.4	8677.3	1042.7	657.7	722.9	765.6	775.5	741.1	693.9	659.6	661.3
67.5°	12816.7	9498.2	789.0	590.7	653.2	704.0	732.1	698.5	648.6	615.1	616.0
70°	12746.9	8902.0	602.5	524.6	591.6	643.2	679.5	653.2	599.7	568.1	570.7
72.5°	11321.8	7447.0	487.4	457.6	529.1	579.8	623.3	603.4	549.0	518.2	518.2
75°	8317.7	5286.3	389.6	389.6	451.2	513.7	561.7	549.0	499.2	477.4	471.1
77.5°	3506.1	2217.8	305.3	323.4	375.0	441.2	501.0	505.5	462.1	489.2	443.9
80°	932.2	611.5	232.9	254.6	294.5	364.2	435.7	434.0	386.8	361.5	336.1
82.5°	355.2	241.0	165.7	179.4	212.9	279.0	345.2	356.1	308.9	267.2	267.2
85°	136.8	103.3	102.4	107.8	124.1	184.8	261.0	270.0	232.9	197.5	203.9
87.5°	35.4	30.9	38.0	36.3	57.1	98.7	149.4	154.9	142.3	82.4	117.8
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)