

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: P963505

Luminaire Tested: **NAV-SB3A-735-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963505
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-SB3A-735-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13482.9 lumens
Efficiency: N/A
Efficacy: 159.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

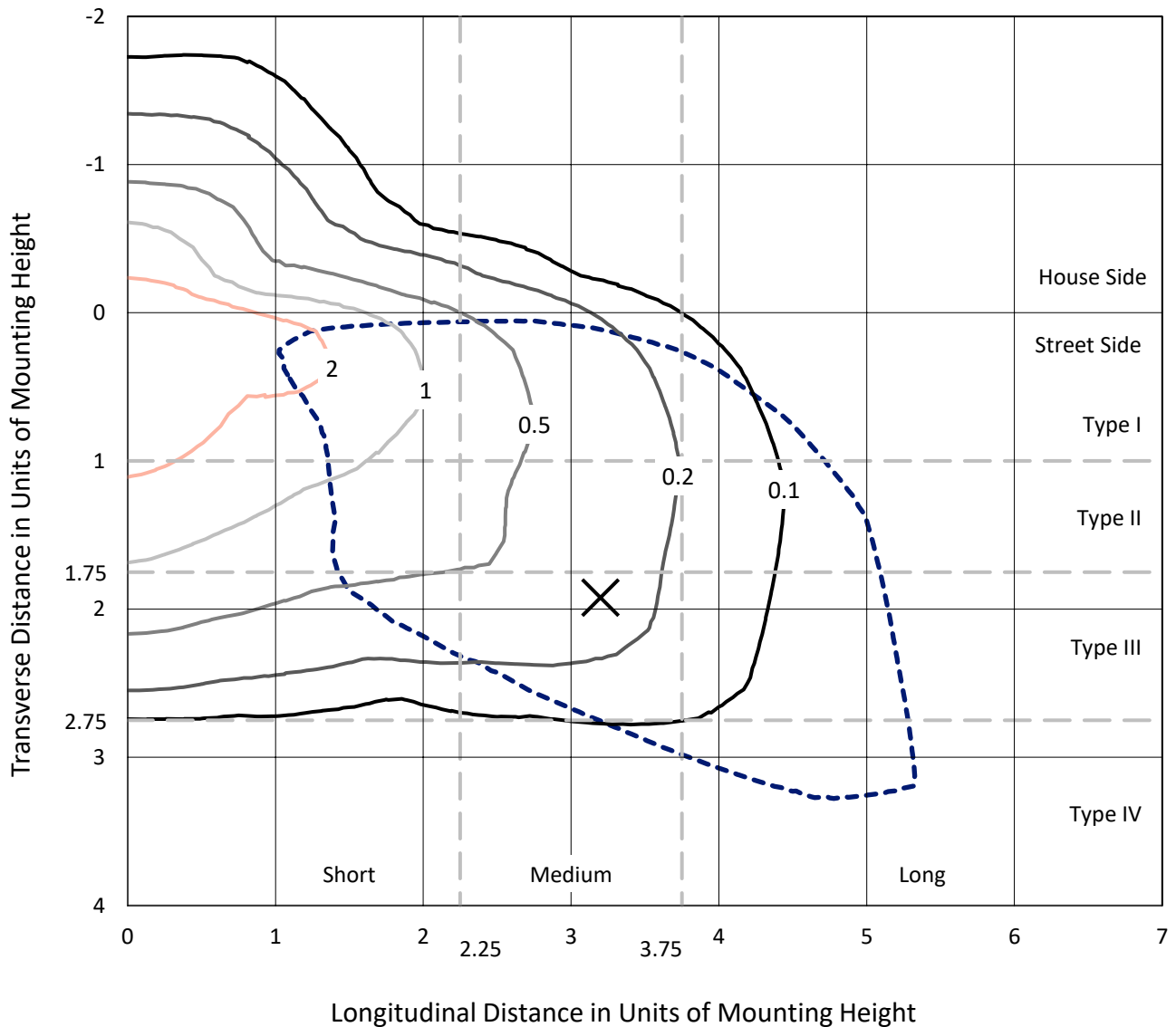
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P963505
 CATALOG NUMBER: NAV-SB3A-735-U-SL3

Iso-Footcandle Lines of Horizontal Illumination

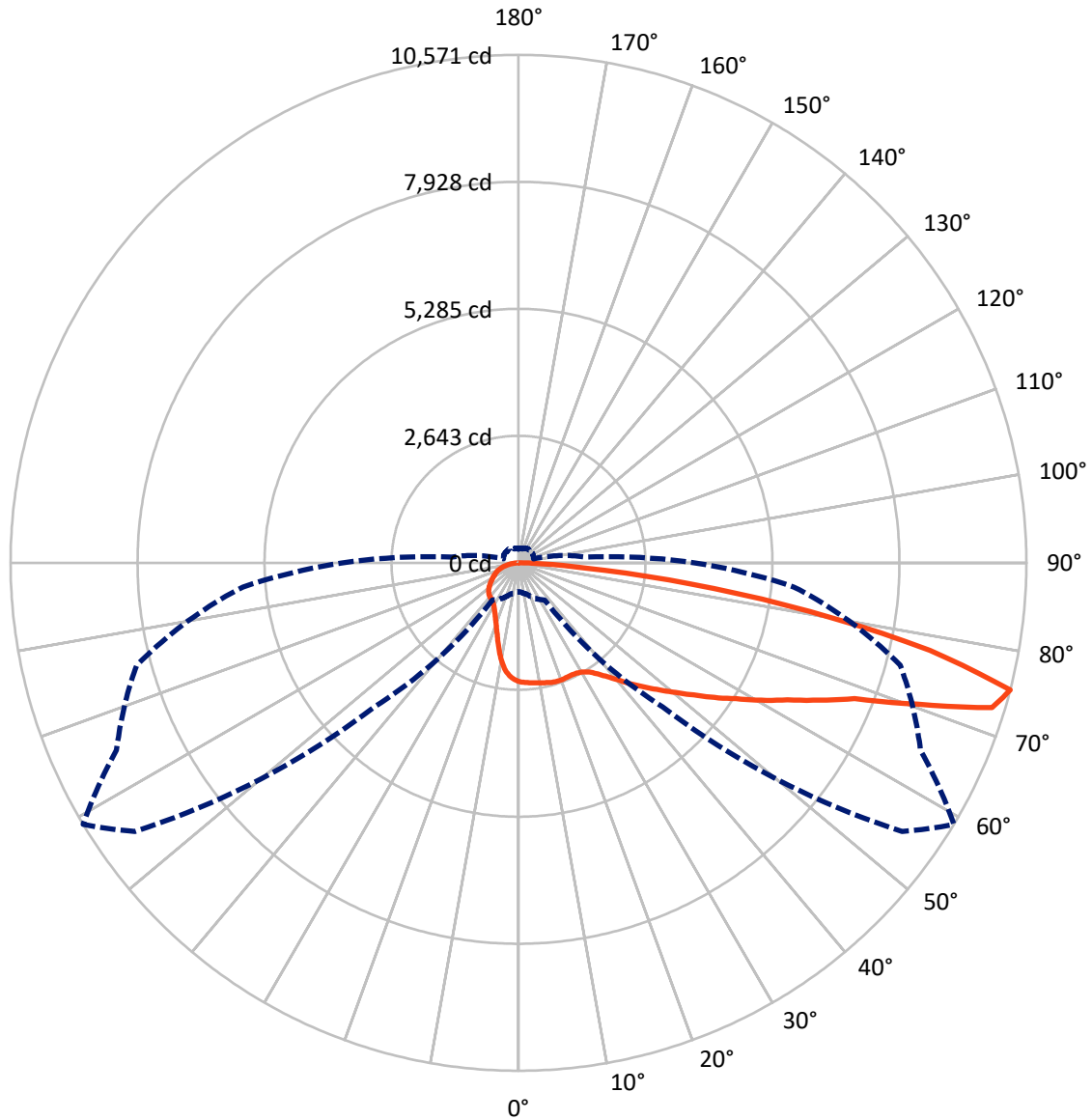
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
 Type IV - Medium - N/A

REPORT NUMBER: P963505
CATALOG NUMBER: NAV-SB3A-735-U-SL3

Luminous Intensity Polar Plot



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

REPORT NUMBER: P963505
 CATALOG NUMBER: NAV-SB3A-735-U-SL3

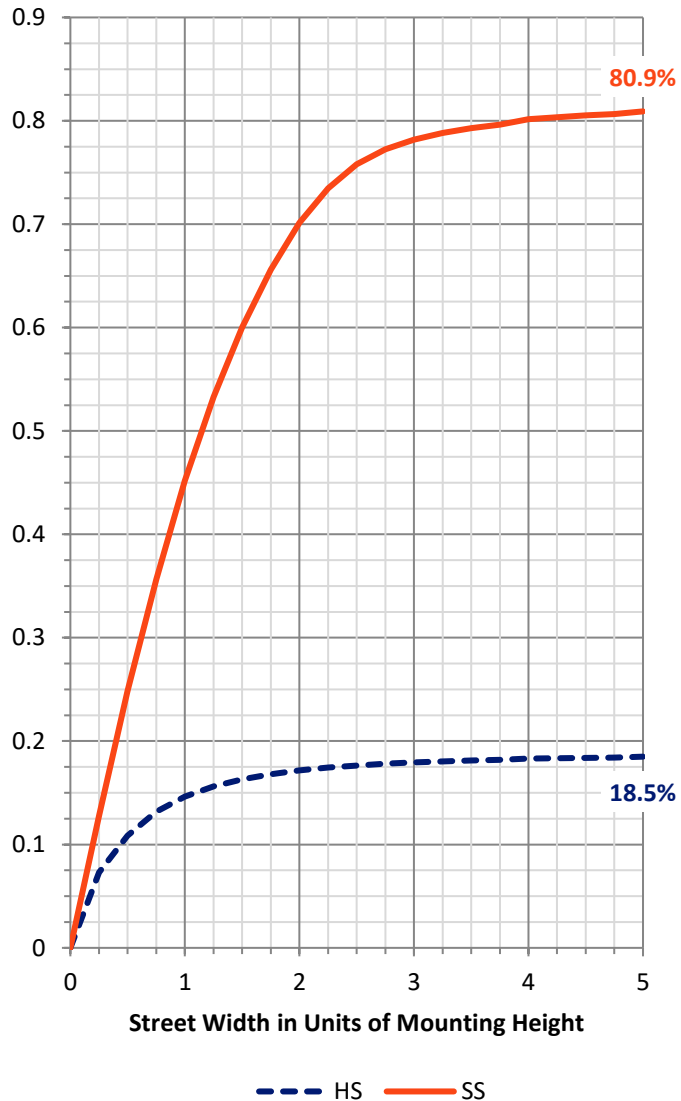
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2528.8	0.0	2528.8
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	10954.1	0.0	10954.1
	% Fixture	81.2	0.0	81.2
Total	Lumens	13482.9	0.0	13482.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.9	1.6
10°-20°	567.2	4.2
20°-30°	861.5	6.4
30°-40°	1280.6	9.5
40°-50°	1904.5	14.1
50°-60°	2585.2	19.2
60°-70°	3156.1	23.4
70°-80°	2476.8	18.4
80°-90°	429.1	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°	13482.9	100.0
0°-180°	13482.9	100.0

Coefficient of Utilization

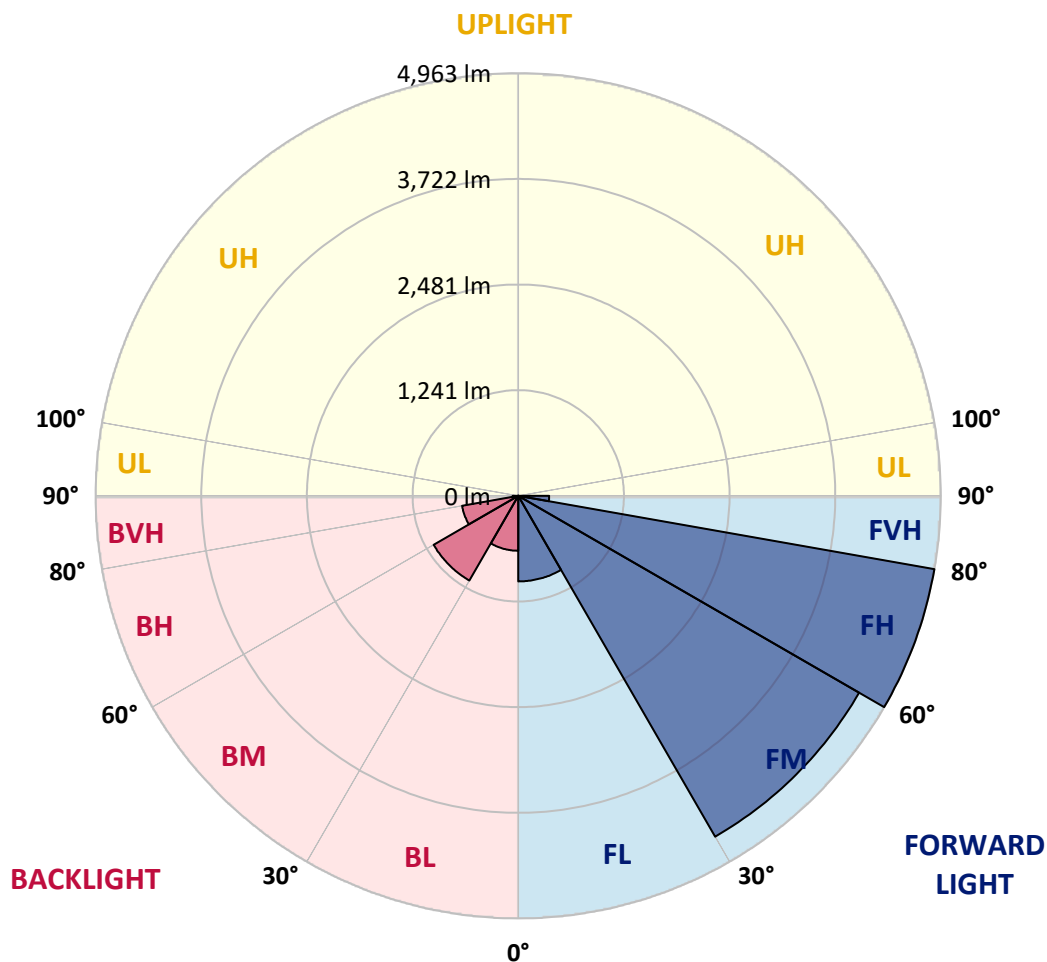


REPORT NUMBER: P963505
 CATALOG NUMBER: NAV-SB3A-735-U-SL3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1005.3	7.5			
FM (30°-60°)	4622.5	34.3			
FH (60°-80°)	4962.9	36.8			G2/5000
FVH (80°-90°)	363.4	2.7			G3/500
BL (0°-30°)	645.3	4.8	B2/1000		
BM (30°-60°)	1147.8	8.5	B2/2500		
BH (60°-80°)	670.0	5.0	B2/1000		G2/1000
BVH (80°-90°)	65.7	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3
 Type IV Medium



REPORT NUMBER: P963505
 CATALOG NUMBER: NAV-SB3A-735-U-SL3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	2474.8	2474.8	2474.8	2474.8	2474.8	2474.8	2474.8	2474.8	2474.8	2474.8	2474.8
2.5°	2495.8	2487.1	2495.8	2492.2	2490.8	2487.8	2488.5	2493.6	2490.8	2494.3	2482.0
5°	2479.1	2474.0	2482.8	2480.5	2489.9	2491.5	2500.9	2506.6	2510.3	2511.0	2501.6
7.5°	2451.5	2446.5	2458.8	2468.9	2489.2	2495.1	2514.6	2524.1	2529.2	2537.9	2524.1
10°	2350.7	2348.6	2379.0	2417.5	2465.3	2495.1	2524.8	2540.8	2548.8	2571.9	2555.9
12.5°	2172.3	2175.2	2215.1	2289.0	2384.8	2480.5	2536.4	2559.6	2571.9	2600.9	2593.7
15°	2001.8	2001.1	2044.7	2123.7	2257.9	2416.7	2542.2	2582.1	2603.1	2645.9	2640.1
17.5°	1903.2	1900.4	1930.8	1991.0	2115.7	2318.8	2527.6	2594.4	2639.4	2693.1	2688.0
20°	1885.1	1879.2	1895.2	1925.0	2013.4	2211.4	2489.9	2594.4	2668.4	2738.1	2735.1
22.5°	1951.1	1941.7	1935.1	1931.5	1970.7	2123.0	2447.2	2585.8	2711.2	2802.6	2797.5
25°	2083.8	2069.3	2036.0	2003.3	1991.7	2083.1	2409.5	2583.5	2775.0	2889.6	2870.7
27.5°	2298.5	2280.3	2212.9	2134.6	2064.2	2103.4	2392.8	2596.6	2845.4	2981.7	2944.0
30°	2564.7	2545.1	2460.2	2339.9	2213.6	2178.8	2413.8	2635.1	2935.3	3104.3	3030.3
32.5°	2803.3	2781.5	2709.0	2586.5	2416.0	2309.4	2480.5	2708.3	3076.7	3274.8	3160.2
35°	3015.1	2989.7	2924.4	2811.3	2664.1	2492.9	2600.9	2838.1	3277.6	3551.8	3336.4
37.5°	3222.5	3192.8	3121.7	3002.0	2899.0	2737.3	2767.1	3005.0	3544.6	3888.3	3570.0
40°	3454.7	3411.8	3325.5	3207.3	3107.2	3023.9	2985.3	3209.5	3815.9	4264.1	3861.6
42.5°	3679.4	3638.9	3535.8	3435.1	3309.6	3285.6	3238.5	3448.8	4112.5	4676.8	4157.5
45°	3921.8	3873.2	3748.4	3620.7	3541.7	3459.7	3483.7	3688.2	4403.3	5097.4	4467.9
47.5°	4148.8	4094.4	3947.1	3805.0	3761.4	3606.3	3708.4	3951.5	4705.8	5523.9	4775.4
50°	4271.4	4217.7	4095.1	3966.7	3932.6	3786.9	3952.2	4240.8	5022.7	5949.0	5070.6
52.5°	4373.6	4315.6	4155.2	4084.2	4074.1	3983.4	4252.5	4571.6	5339.7	6324.7	5355.6
55°	4482.4	4417.9	4213.3	4149.5	4195.9	4203.8	4608.6	4946.5	5674.8	6691.0	5624.8
57.5°	4607.9	4525.9	4269.1	4204.7	4314.8	4462.1	5017.7	5335.3	6004.0	7030.4	5864.1
60°	4726.1	4643.5	4376.5	4292.4	4443.3	4761.6	5486.9	5806.1	6376.9	7332.8	6090.4
62.5°	4749.3	4681.2	4462.1	4461.3	4617.3	5111.3	6042.6	6281.2	6702.6	7631.6	6293.5
65°	4347.5	4304.7	4174.8	4454.9	4866.8	5614.6	6661.2	6888.9	7116.7	7892.8	6472.0
67.5°	3308.8	3314.6	3305.2	3845.6	4665.2	6337.8	7557.0	7539.6	7628.0	8185.9	6677.2
70°	1513.0	1547.0	1769.0	2654.6	3737.5	6421.1	9038.0	8812.4	8269.9	8565.1	6854.9
72.5°	817.4	843.6	934.2	1286.0	2247.0	5708.8	10144.8	10305.1	9123.6	8820.4	6659.7
75°	599.8	614.4	677.4	817.4	943.6	4243.1	9748.2	10570.6	9230.2	8225.0	5751.0
77.5°	449.0	455.5	507.0	647.7	483.1	2236.9	7789.1	8754.4	7901.5	6757.7	4248.1
80°	325.6	332.9	371.4	486.0	338.8	818.2	5348.4	6144.8	5411.5	4307.6	2117.1
82.5°	224.9	227.8	244.5	330.8	236.5	317.6	3034.7	3603.3	3020.9	1511.6	571.5
85°	135.6	139.3	146.5	192.9	134.2	150.9	1309.9	1354.8	903.0	361.2	177.7
87.5°	55.9	59.4	65.3	81.3	53.0	42.0	216.2	271.2	169.0	105.9	55.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P963505
 CATALOG NUMBER: NAV-SB3A-735-U-SL3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2474.8	2474.8	2474.8	2474.8	2474.8	2474.8	2474.8	2474.8	2474.8	2474.8	2474.8
2.5°	2478.3	2473.3	2459.5	2440.6	2423.2	2401.5	2392.0	2384.0	2376.9	2363.0	2356.5
5°	2493.6	2479.8	2442.9	2394.9	2340.6	2281.1	2223.0	2183.1	2149.1	2123.7	2102.7
7.5°	2516.8	2490.8	2423.2	2325.3	2200.6	2073.0	1957.6	1875.6	1813.9	1791.5	1752.3
10°	2540.8	2509.6	2392.0	2219.4	2004.0	1807.5	1654.5	1570.3	1521.0	1505.0	1480.3
12.5°	2569.1	2523.3	2343.5	2072.2	1784.2	1568.9	1435.4	1386.1	1360.7	1352.0	1354.1
15°	2610.4	2534.9	2270.2	1887.9	1574.6	1394.7	1308.4	1274.4	1261.3	1260.5	1263.5
17.5°	2641.5	2537.1	2156.3	1690.7	1413.6	1289.6	1218.5	1205.5	1214.1	1227.2	1232.3
20°	2676.4	2517.5	2007.0	1510.8	1300.5	1197.5	1167.8	1176.5	1197.5	1216.4	1222.8
22.5°	2701.1	2482.0	1826.3	1370.8	1202.5	1144.5	1143.1	1161.2	1172.8	1182.2	1187.4
25°	2722.8	2421.8	1634.9	1253.4	1122.1	1112.6	1128.6	1122.8	1114.8	1122.8	1127.8
27.5°	2738.8	2326.8	1463.7	1150.4	1065.5	1090.9	1081.5	1068.4	1067.6	1072.0	1079.2
30°	2733.7	2199.9	1323.0	1052.5	1025.6	1050.2	1027.8	1025.6	1023.4	1025.6	1033.6
32.5°	2733.7	2055.5	1214.9	984.9	1000.2	990.8	988.6	983.5	974.8	974.1	983.5
35°	2748.9	1911.2	1122.1	948.7	979.2	956.6	958.2	945.8	927.6	919.0	927.6
37.5°	2780.1	1795.2	1029.9	931.3	942.2	941.5	935.6	914.6	882.7	855.2	864.6
40°	2855.5	1761.1	966.9	923.3	924.8	933.5	918.2	877.6	805.1	760.1	765.9
42.5°	2973.7	1818.4	953.0	903.7	913.2	921.9	892.2	797.9	746.3	719.6	719.6
45°	3123.9	1918.4	982.8	875.5	885.6	900.9	812.3	767.4	744.2	744.9	748.6
47.5°	3313.9	2023.6	1037.9	850.7	845.7	854.4	759.4	731.8	699.9	707.9	728.2
50°	3533.7	2130.3	1090.1	817.4	801.4	773.2	725.3	699.2	658.6	639.7	644.8
52.5°	3771.6	2233.3	1111.2	776.8	753.6	721.0	702.1	670.1	620.8	589.7	589.0
55°	3997.2	2326.8	1087.9	728.2	705.7	680.3	677.4	657.8	605.0	561.4	561.4
57.5°	4210.4	2405.2	1029.9	678.9	657.1	641.9	661.4	652.0	585.3	529.5	526.5
60°	4391.0	2458.8	945.8	628.8	613.6	605.7	635.4	632.4	557.8	495.4	493.2
62.5°	4534.6	2479.8	853.0	581.0	577.4	562.8	599.1	599.1	523.0	462.1	459.8
65°	4647.0	2459.5	758.7	533.8	541.1	519.4	554.8	550.5	486.0	432.2	429.4
67.5°	4746.4	2392.8	654.3	487.4	504.1	476.5	508.4	498.3	445.4	402.5	399.6
70°	4790.6	2237.6	535.3	441.0	461.2	434.5	462.1	443.2	399.6	370.6	364.8
72.5°	4435.3	1859.7	421.4	392.4	409.8	388.1	411.9	390.2	350.3	337.2	326.4
75°	3669.3	1395.5	324.2	339.5	352.5	335.8	351.8	335.8	299.5	308.9	282.2
77.5°	2664.8	942.2	248.0	283.6	289.4	280.6	294.5	276.3	243.7	241.5	230.6
80°	1325.1	552.0	194.3	224.2	221.9	216.2	232.1	223.3	195.9	207.5	205.3
82.5°	383.7	236.5	141.4	157.4	153.0	154.5	166.0	170.5	255.3	253.2	258.9
85°	120.4	92.9	84.9	87.7	83.4	85.6	97.9	194.3	179.9	105.2	113.9
87.5°	31.2	31.9	21.0	22.4	23.2	27.6	31.2	118.2	56.6	37.0	39.2
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)