

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: P962893

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

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962893
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
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-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12582.9 lumens
Efficiency: N/A
Efficacy: 85.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

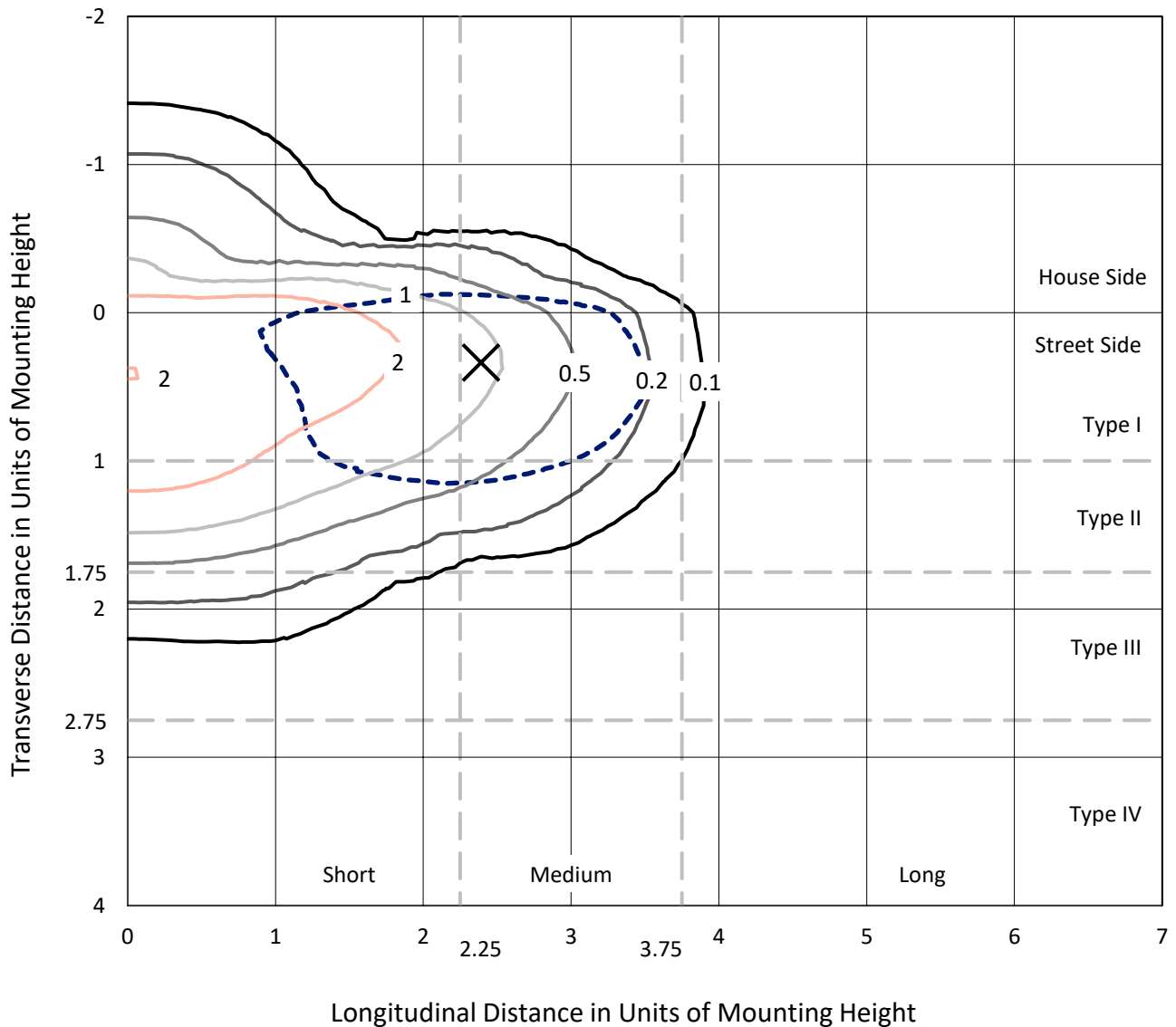
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

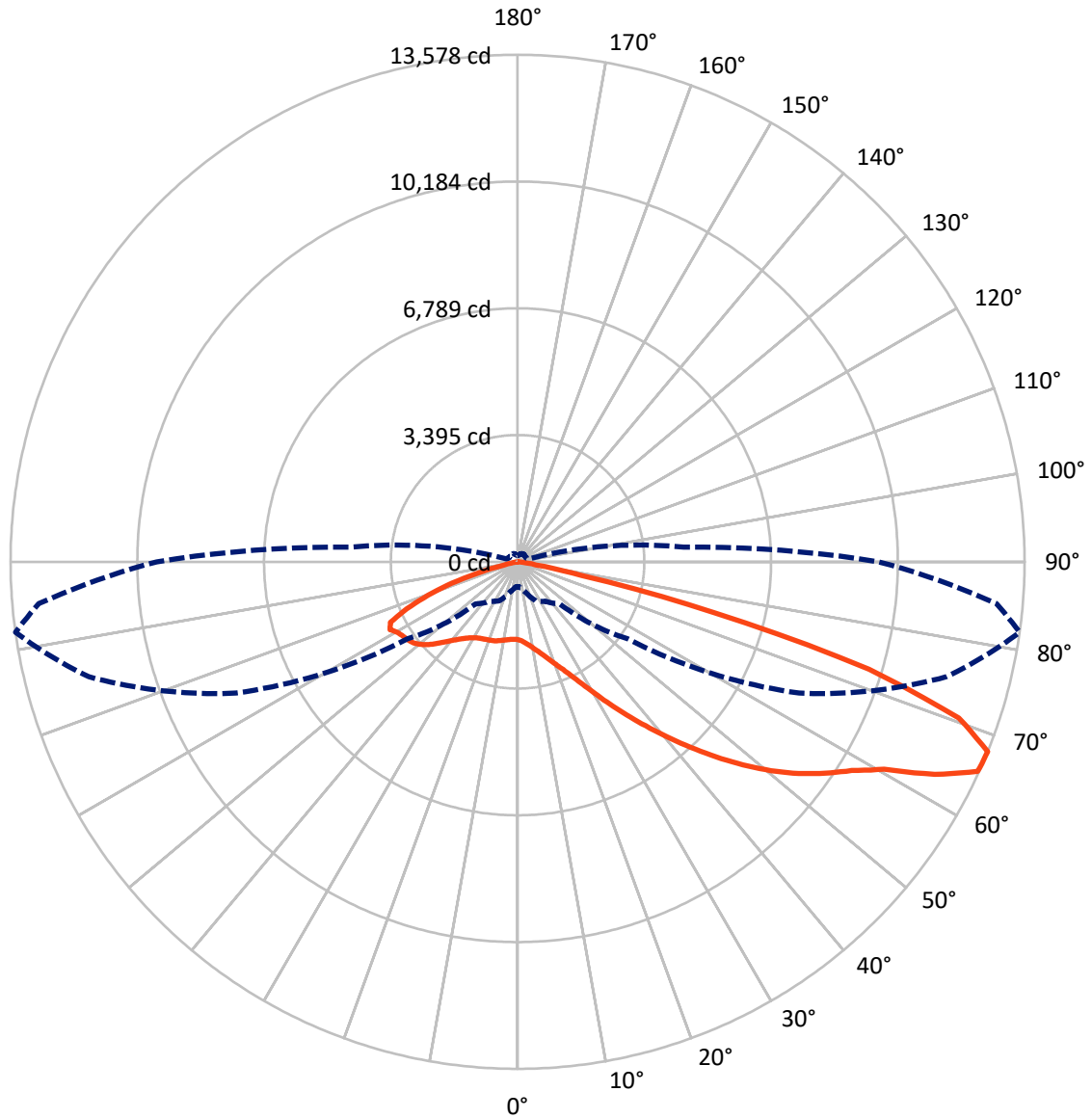
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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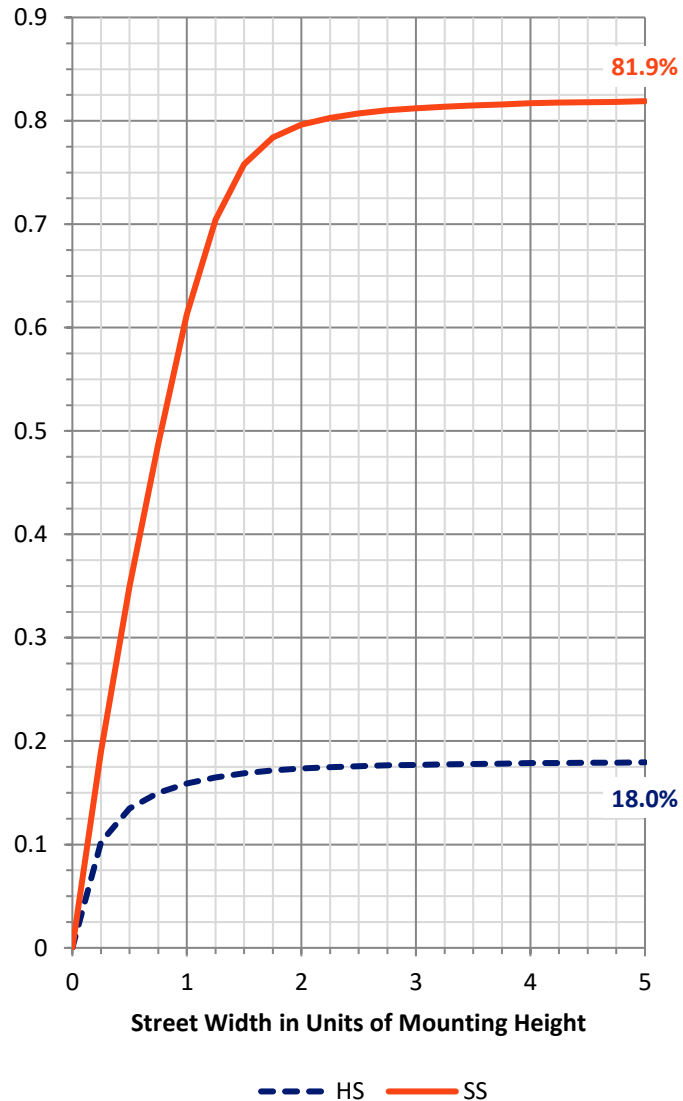
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2279.3	0.0	2279.3
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	10303.6	0.0	10303.6
	% Fixture	81.9	0.0	81.9
Total	Lumens	12582.9	0.0	12582.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.7	1.5
10°-20°	482.6	3.8
20°-30°	773.0	6.1
30°-40°	1366.9	10.9
40°-50°	2394.9	19.0
50°-60°	3194.1	25.4
60°-70°	2973.6	23.6
70°-80°	1141.2	9.1
80°-90°	70.9	0.6
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°	12582.9	100.0
0°-180°	12582.9	100.0

Coefficient of Utilization



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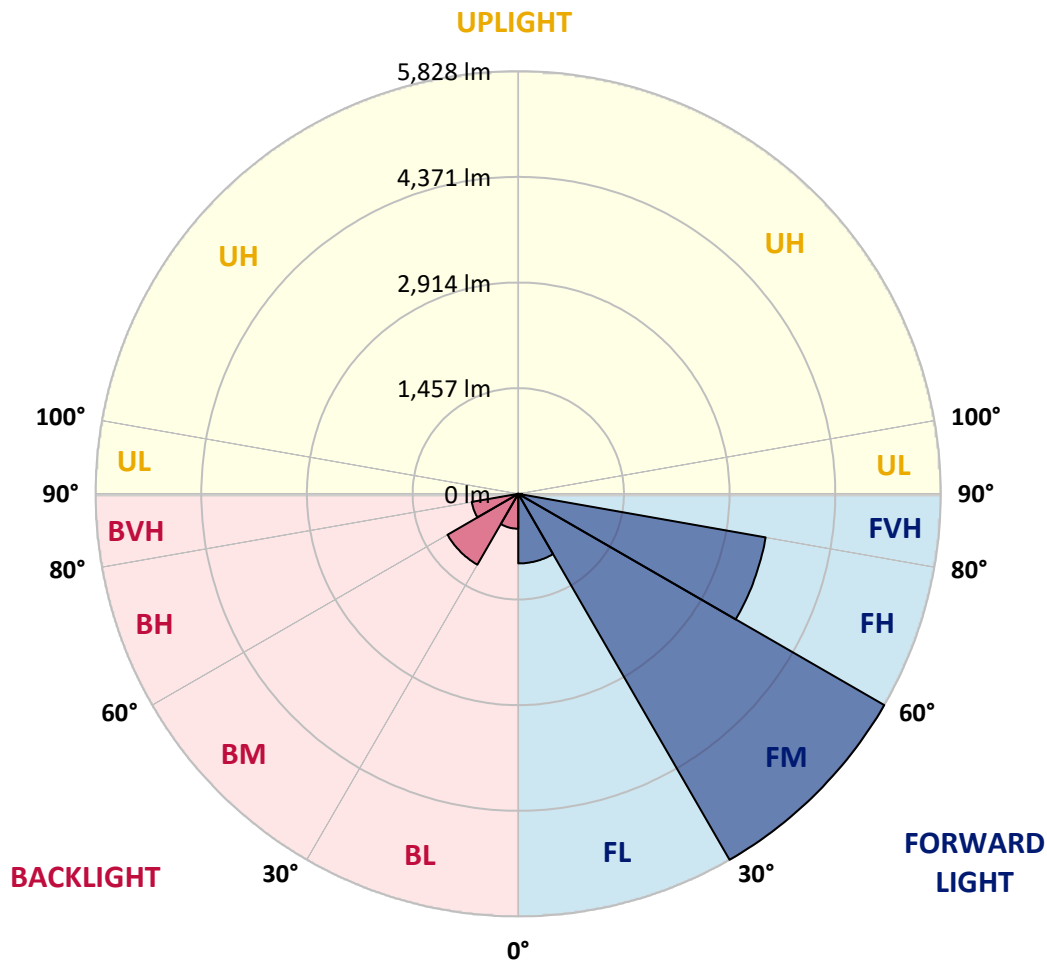
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	959.9	7.6			
FM (30°-60°)	5827.9	46.3			
FH (60°-80°)	3464.3	27.5			G2/5000
FVH (80°-90°)	51.5	0.4			G1/100
BL (0°-30°)	481.4	3.8	B1/500		
BM (30°-60°)	1128.0	9.0	B2/2500		
BH (60°-80°)	650.5	5.2	B2/1000		G2/1000
BVH (80°-90°)	19.3	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2084.5	2084.5	2084.5	2084.5	2084.5	2084.5	2084.5	2084.5	2084.5	2084.5	2084.5
2.5°	2203.2	2215.9	2208.7	2205.1	2198.7	2189.6	2182.4	2159.8	2136.2	2120.8	2115.4
5°	2247.6	2260.3	2259.4	2263.0	2267.6	2270.3	2268.4	2243.1	2209.6	2183.4	2167.9
7.5°	2209.6	2224.0	2235.8	2254.0	2285.6	2319.2	2335.5	2330.0	2295.7	2259.4	2240.3
10°	2101.8	2117.1	2145.2	2187.9	2254.9	2327.4	2388.0	2416.1	2394.4	2354.5	2328.3
12.5°	1904.2	1919.7	1975.0	2067.3	2179.7	2305.6	2421.6	2496.8	2502.2	2462.4	2431.5
15°	1682.3	1697.7	1756.6	1872.6	2043.7	2245.8	2439.7	2581.9	2629.9	2595.5	2558.4
17.5°	1544.6	1558.2	1602.6	1696.0	1874.4	2126.3	2433.4	2672.5	2782.2	2755.0	2710.6
20°	1503.0	1514.7	1535.6	1600.7	1749.4	2002.1	2391.6	2757.7	2946.2	2930.7	2880.9
22.5°	1547.3	1558.2	1564.6	1593.6	1686.8	1920.5	2339.2	2844.7	3136.4	3138.1	3077.5
25°	1649.7	1660.6	1653.3	1671.5	1712.3	1895.2	2319.2	2947.0	3375.5	3395.4	3326.6
27.5°	1818.2	1819.2	1802.0	1801.0	1807.4	1933.3	2340.1	3056.7	3677.2	3714.3	3629.2
30°	2156.1	2142.6	2076.4	2004.8	1972.2	2047.4	2398.0	3186.2	4033.3	4099.4	3992.5
32.5°	2677.0	2657.1	2535.7	2364.5	2192.4	2231.3	2502.2	3333.8	4420.9	4540.5	4410.1
35°	3242.4	3237.0	3110.1	2855.5	2554.7	2493.1	2671.6	3527.7	4844.0	5034.3	4879.4
37.5°	3767.8	3765.0	3692.6	3392.7	3026.7	2858.2	2943.4	3781.4	5297.0	5572.4	5389.4
40°	4247.9	4256.1	4183.6	3915.5	3546.7	3326.6	3313.0	4094.9	5800.7	6158.6	5941.1
42.5°	4662.8	4672.0	4598.6	4400.1	4060.4	3844.8	3766.9	4478.9	6292.7	6788.2	6530.9
45°	4944.6	5000.8	4989.9	4831.3	4587.7	4363.9	4312.3	4960.9	6853.5	7455.8	7154.2
47.5°	5024.3	5076.0	5157.5	5179.2	5030.7	4810.5	4872.1	5541.7	7420.5	8124.5	7781.1
50°	4827.8	4875.7	5045.2	5270.8	5374.0	5306.1	5416.6	6164.0	8001.3	8791.2	8396.2
52.5°	4440.0	4488.9	4702.7	5059.7	5480.9	5694.7	5962.8	6777.3	8563.8	9422.6	8978.7
55°	3879.2	3930.9	4205.4	4609.4	5277.1	5855.1	6418.5	7389.7	9079.3	9990.7	9504.2
57.5°	3116.4	3154.4	3439.8	4005.2	4764.3	5695.6	6754.6	8058.3	9564.9	10548.7	10025.1
60°	2031.1	2064.7	2396.2	3026.7	3914.6	5162.9	6821.7	8803.9	10209.9	11274.4	10727.2
62.5°	1350.7	1373.4	1570.0	2032.9	2756.7	4140.2	6429.4	9399.0	11155.7	12537.3	11931.2
65°	926.8	949.5	1146.1	1468.5	1781.0	2738.7	5301.5	9320.3	12012.7	13540.1	12823.6
67.5°	661.3	680.4	847.1	1151.5	1289.1	1590.8	3593.9	8312.9	11889.5	13578.2	12871.5
70°	473.8	484.7	622.4	896.9	1024.6	955.8	1998.5	6357.9	10410.1	12538.2	11891.3
72.5°	331.6	335.2	432.1	683.1	825.3	697.6	951.2	4238.9	7873.5	9841.2	9218.8
75°	224.7	229.2	290.8	501.0	662.3	532.7	503.7	2273.0	4622.1	5447.4	4883.0
77.5°	137.7	139.5	187.6	342.5	495.6	405.9	324.3	963.0	1788.3	1755.7	1496.6
80°	77.9	77.9	119.6	212.9	337.9	261.8	227.3	409.5	566.2	497.3	438.5
82.5°	43.5	44.4	86.9	132.2	223.8	154.9	125.0	189.3	244.6	216.5	188.4
85°	18.1	19.9	53.4	62.5	106.9	77.0	50.7	79.7	90.6	80.7	58.8
87.5°	1.8	2.8	16.3	11.8	12.7	15.4	7.3	15.4	12.7	12.7	9.0
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°	2084.5	2084.5	2084.5	2084.5	2084.5	2084.5	2084.5	2084.5	2084.5	2084.5	2084.5
2.5°	2098.2	2084.5	2050.1	2010.2	1957.7	1932.3	1897.9	1874.4	1854.4	1856.3	1838.1
5°	2138.9	2104.5	2027.4	1931.4	1811.9	1726.7	1636.1	1573.6	1522.8	1512.0	1487.6
7.5°	2195.0	2140.7	2005.7	1832.7	1630.7	1477.5	1340.8	1253.0	1190.4	1170.4	1150.6
10°	2267.6	2188.8	1977.6	1708.6	1417.8	1223.0	1076.2	1007.4	964.8	950.3	939.4
12.5°	2351.9	2244.0	1940.5	1557.3	1198.5	1011.1	917.7	883.2	869.7	865.2	862.4
15°	2457.8	2312.8	1884.4	1377.9	1012.8	881.5	841.6	837.1	838.9	837.1	836.2
17.5°	2583.7	2388.0	1792.8	1193.1	887.9	815.4	800.8	804.5	809.0	808.1	806.3
20°	2721.5	2462.4	1676.0	1029.1	802.7	768.2	760.0	763.7	767.3	765.5	764.6
22.5°	2878.2	2542.1	1546.4	901.4	745.6	724.8	715.7	716.6	716.6	713.0	711.1
25°	3065.7	2629.9	1410.5	810.8	702.1	685.8	675.0	671.3	665.8	655.0	653.1
27.5°	3289.4	2723.2	1280.1	747.4	667.7	652.3	639.6	630.6	616.9	598.8	597.1
30°	3541.3	2836.5	1169.5	707.6	640.5	625.1	610.6	597.1	577.1	554.4	552.6
32.5°	3837.5	2957.8	1089.0	681.2	616.0	599.7	582.5	566.2	544.5	521.8	522.8
35°	4190.8	3104.6	1041.8	663.2	597.1	575.2	556.3	538.1	521.8	501.8	500.1
37.5°	4574.1	3260.4	1027.4	654.1	584.4	550.8	529.1	516.4	514.6	502.8	501.8
40°	4993.5	3445.2	1038.2	648.6	570.7	527.3	503.7	501.0	505.5	484.7	485.5
42.5°	5437.4	3664.5	1056.4	642.3	551.8	503.7	481.0	481.0	477.4	448.4	448.4
45°	5917.5	3917.2	1074.4	626.9	529.1	480.1	462.9	456.6	441.2	413.1	412.2
47.5°	6401.3	4174.5	1088.0	598.8	501.8	460.2	444.8	430.3	407.6	382.3	381.4
50°	6860.6	4405.6	1073.6	557.2	471.1	441.2	424.9	405.0	380.5	363.3	360.6
52.5°	7271.0	4605.7	1012.0	508.2	438.5	421.3	406.7	385.9	366.0	347.9	346.0
55°	7627.9	4768.0	903.2	462.1	409.5	404.1	389.6	363.3	336.1	320.7	318.9
57.5°	7970.4	4891.2	767.3	423.9	383.2	385.0	363.3	339.7	314.4	298.1	296.2
60°	8426.1	5056.0	629.7	388.7	355.2	360.6	337.0	319.8	288.1	267.2	264.6
62.5°	9154.5	5312.4	500.1	345.1	322.5	324.3	314.4	293.6	255.4	231.0	229.2
65°	9732.5	5218.2	394.1	298.1	285.4	288.1	288.1	265.5	224.7	196.6	193.8
67.5°	9667.3	4468.1	314.4	251.8	250.0	251.8	258.2	239.1	199.3	176.6	173.0
70°	8905.4	3554.0	251.8	209.3	217.4	212.9	231.0	218.3	179.4	156.7	154.1
72.5°	7266.5	2560.1	192.1	173.0	166.7	173.9	208.4	196.6	149.4	124.1	121.4
75°	4246.2	1366.1	143.1	136.8	120.5	144.9	184.8	167.6	114.2	91.5	88.8
77.5°	1382.4	476.5	105.1	100.6	89.7	116.8	157.6	141.3	93.3	72.5	69.8
80°	370.5	144.0	71.5	66.1	58.0	86.9	125.0	112.3	67.0	47.2	46.2
82.5°	148.5	60.7	41.7	37.1	31.7	59.8	98.7	90.6	49.8	29.9	29.9
85°	48.0	19.9	15.4	11.8	14.5	37.1	58.8	61.6	35.4	15.4	11.8
87.5°	6.4	2.8	2.8	3.6	2.8	6.4	18.1	17.2	9.9	1.8	0.0
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)