

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: P967648

Luminaire Tested: **NAV-SB5A-722-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967648
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-722-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14779.5 lumens
Efficiency: N/A
Efficacy: 104.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

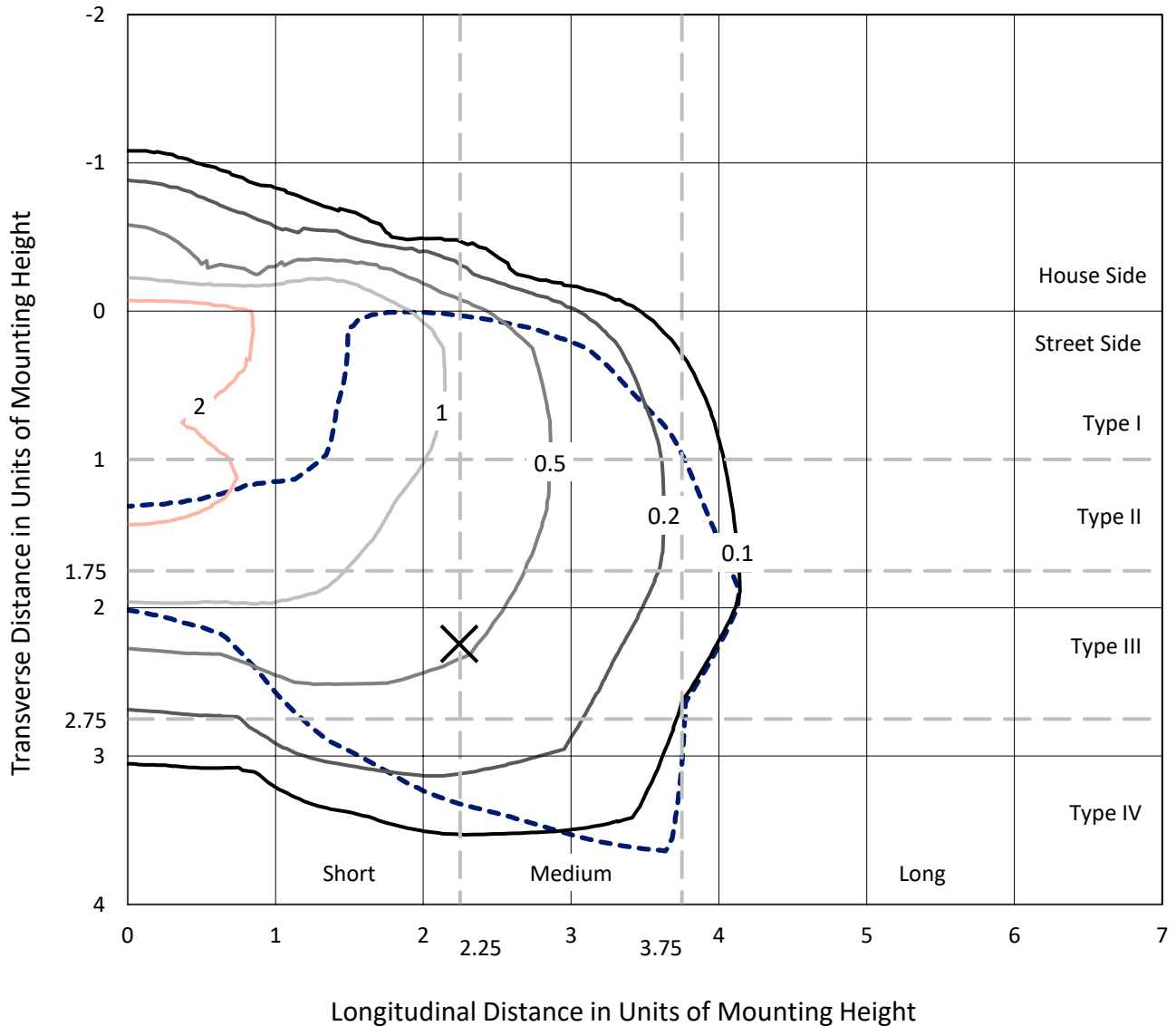
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

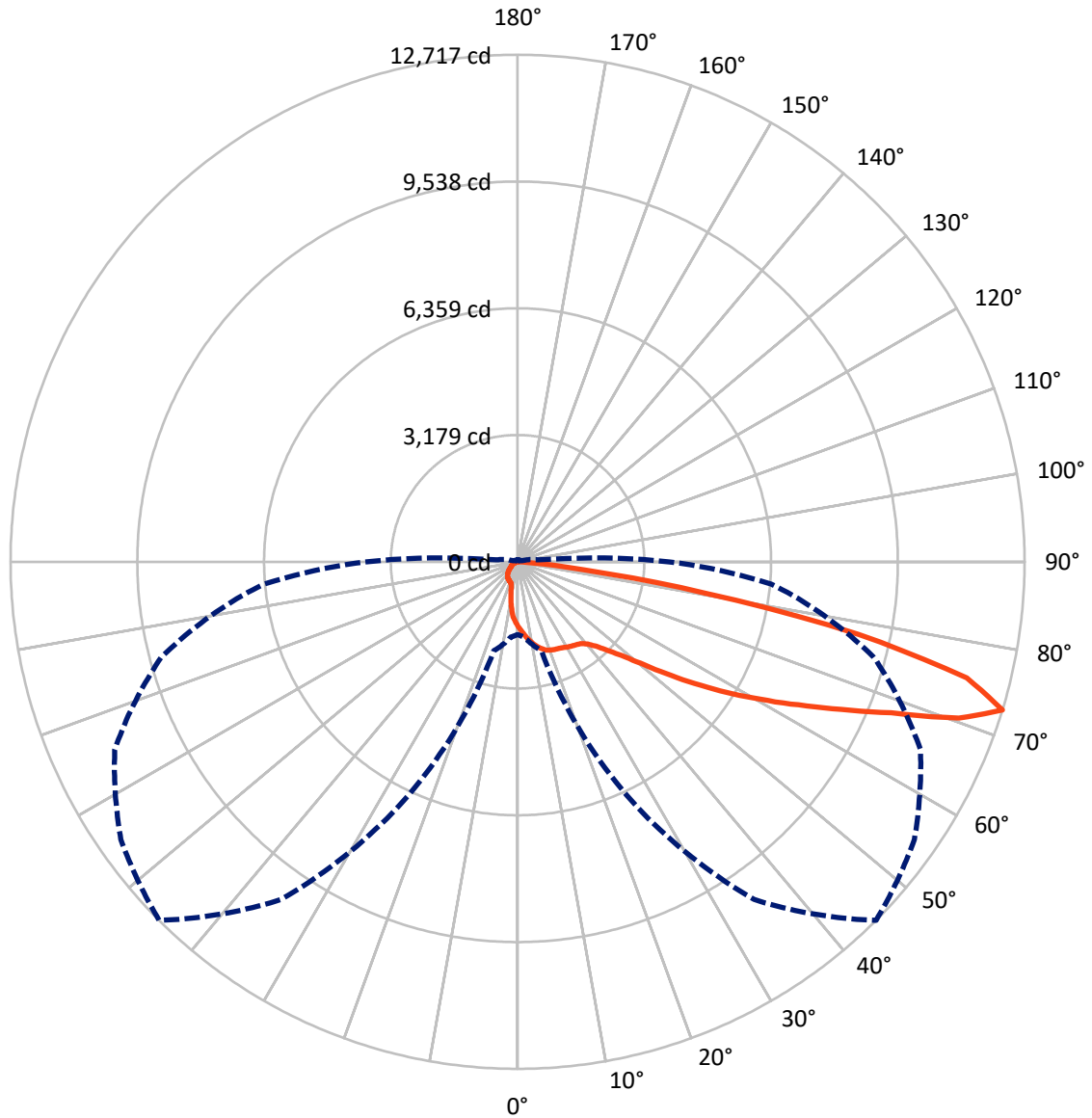
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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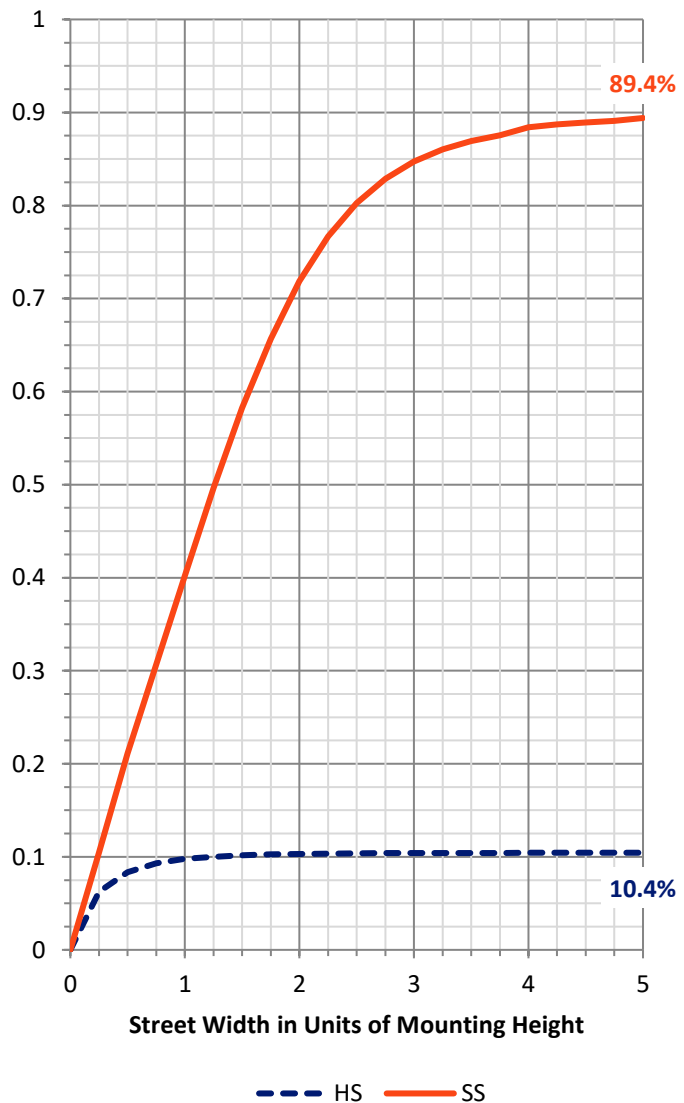
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1552.9	0.0	1552.9
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	13226.6	0.0	13226.6
	% Fixture	89.5	0.0	89.5
Total	Lumens	14779.5	0.0	14779.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.6	1.0
10°-20°	445.8	3.0
20°-30°	732.2	5.0
30°-40°	1038.4	7.0
40°-50°	1716.3	11.6
50°-60°	3083.2	20.9
60°-70°	4281.1	29.0
70°-80°	3105.4	21.0
80°-90°	224.5	1.5
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°	14779.5	100.0
0°-180°	14779.5	100.0

Coefficient of Utilization



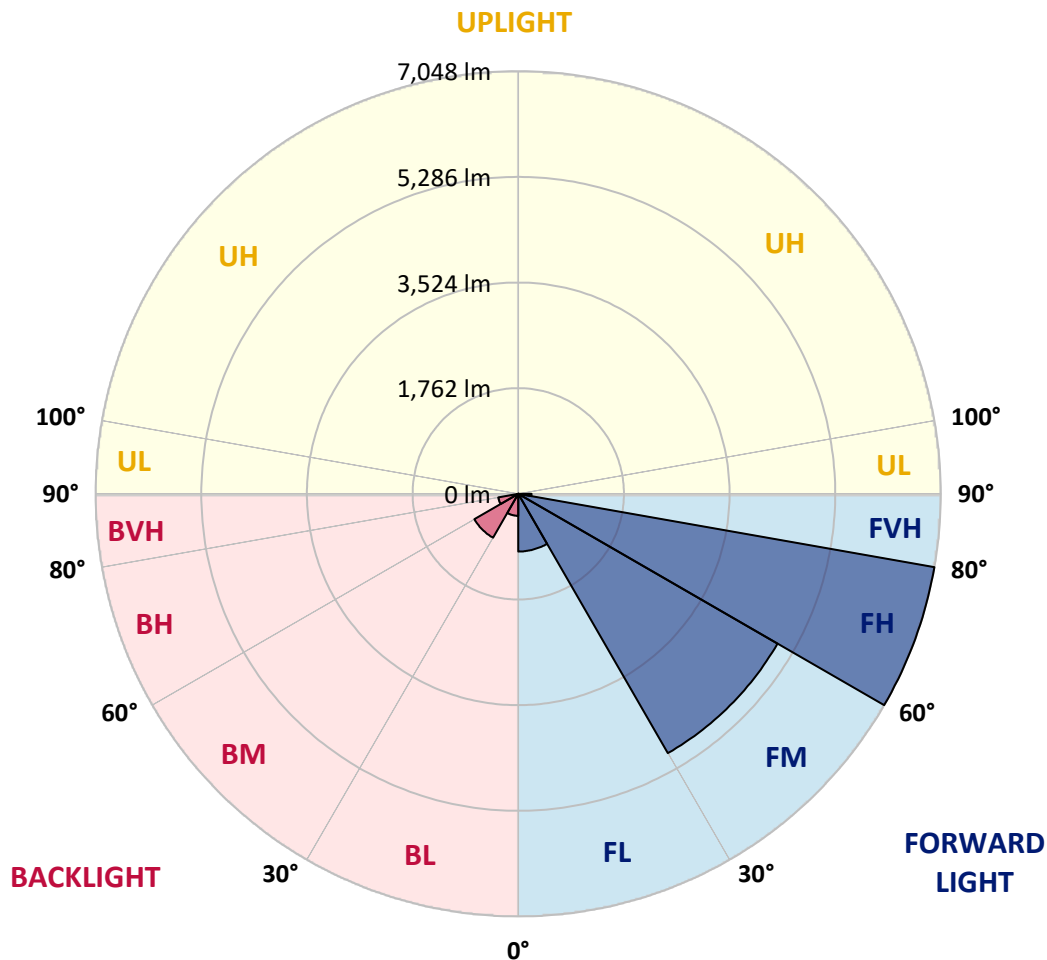
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	962.7	6.5			
FM (30°-60°)	4993.3	33.8			
FH (60°-80°)	7047.9	47.7			G3/7500
FVH (80°-90°)	222.6	1.5			G2/225
BL (0°-30°)	367.8	2.5	B1/500		
BM (30°-60°)	844.6	5.7	B1/1000		
BH (60°-80°)	338.6	2.3	B1/500		G1/500
BVH (80°-90°)	1.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1619.1	1619.1	1619.1	1619.1	1619.1	1619.1	1619.1	1619.1	1619.1	1619.1	1619.1
2.5°	1768.4	1771.4	1769.5	1757.4	1737.2	1726.1	1720.1	1699.9	1686.7	1663.5	1639.3
5°	1930.8	1943.0	1935.9	1911.6	1873.3	1846.1	1838.0	1796.7	1759.3	1716.0	1665.5
7.5°	2103.3	2109.4	2096.3	2065.0	2013.6	1967.2	1960.1	1902.6	1843.1	1776.5	1707.9
10°	2252.6	2259.7	2239.5	2194.1	2135.6	2078.1	2068.0	2004.5	1933.9	1852.2	1764.4
12.5°	2377.7	2384.8	2358.5	2304.1	2239.5	2180.0	2169.9	2103.3	2025.7	1934.9	1825.9
15°	2472.6	2485.7	2450.4	2391.8	2322.2	2262.7	2257.7	2192.2	2116.4	2015.6	1899.5
17.5°	2528.1	2541.2	2507.9	2437.2	2377.7	2327.3	2321.2	2266.8	2196.2	2099.3	1971.2
20°	2537.1	2549.3	2513.9	2452.4	2403.0	2362.6	2359.5	2320.2	2268.8	2176.0	2048.9
22.5°	2509.9	2525.0	2492.7	2443.3	2409.1	2387.8	2383.8	2361.6	2332.4	2253.7	2121.5
25°	2481.6	2493.7	2469.5	2426.2	2408.0	2406.0	2409.1	2405.0	2398.9	2332.4	2206.2
27.5°	2479.7	2492.7	2465.5	2424.1	2414.1	2435.2	2438.3	2457.4	2462.5	2403.9	2288.0
30°	2496.8	2505.8	2479.7	2436.2	2431.2	2479.7	2480.6	2514.9	2523.0	2464.5	2368.7
32.5°	2534.1	2544.2	2517.9	2454.4	2447.4	2514.9	2517.9	2563.3	2576.4	2529.1	2453.4
35°	2621.8	2633.9	2603.7	2504.9	2479.7	2548.3	2557.3	2610.8	2637.0	2597.7	2541.2
37.5°	2840.8	2805.4	2764.1	2606.8	2553.3	2600.7	2615.8	2678.3	2724.8	2679.4	2646.0
40°	3384.6	3273.5	3144.4	2780.2	2682.4	2712.7	2724.8	2787.3	2850.8	2806.4	2790.4
42.5°	4200.7	4069.5	3861.7	3179.8	2877.1	2892.2	2901.3	2955.8	3045.6	3010.2	3014.3
45°	4928.0	4880.5	4668.8	3861.7	3241.3	3166.6	3177.7	3206.0	3338.1	3325.0	3351.2
47.5°	5486.8	5459.7	5296.2	4644.5	3856.7	3502.5	3533.8	3546.9	3737.6	3784.0	3854.6
50°	5916.6	5906.6	5760.3	5340.6	4660.7	3997.9	4009.0	3980.7	4266.3	4381.3	4515.4
52.5°	6322.1	6356.4	6248.5	5987.2	5519.1	4646.5	4644.5	4511.3	4896.7	5070.3	5299.2
55°	6688.3	6700.4	6711.5	6647.0	6382.7	5384.9	5365.8	5147.9	5628.1	5807.6	6055.8
57.5°	7032.3	7037.3	7136.3	7268.4	7281.5	6177.9	6142.6	5881.3	6427.1	6555.2	6707.5
60°	7263.4	7286.5	7495.4	7862.6	8023.0	6996.0	6976.9	6710.6	7240.2	7299.6	7271.5
62.5°	6930.4	7071.7	7598.3	8326.6	8723.1	7903.0	7893.8	7643.6	8095.7	8047.2	7805.1
65°	5609.9	5849.1	6775.1	8640.3	9410.1	8915.8	8928.9	8662.6	8974.3	8816.9	8238.8
67.5°	3924.2	4176.5	5272.0	8665.6	10177.7	10105.2	10180.8	9763.1	9907.4	9554.3	8341.8
70°	2713.7	2843.8	3557.1	8122.8	10776.0	11743.4	11741.4	11115.0	10835.5	9890.2	7817.2
72.5°	1824.9	1892.5	2310.1	6444.2	10336.2	12717.0	12658.4	12148.0	11148.2	9249.7	6386.7
75°	769.7	819.2	1069.3	3621.6	8177.3	11634.5	11476.1	10735.6	9905.4	7283.5	3984.8
77.5°	244.2	265.3	421.7	1296.3	4504.3	8745.3	8577.8	6704.5	6638.9	3653.9	1456.7
80°	116.0	135.2	237.1	520.5	1772.4	4756.5	4733.2	3041.5	2856.0	986.6	292.5
82.5°	50.4	59.6	131.1	278.4	792.9	1696.8	1731.1	1035.0	856.5	374.2	89.8
85°	16.1	21.2	60.6	128.1	335.0	421.7	416.7	246.1	345.0	203.8	31.3
87.5°	0.0	0.0	20.2	29.2	34.3	24.2	27.3	21.2	95.8	56.5	11.1
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°	1619.1	1619.1	1619.1	1619.1	1619.1	1619.1	1619.1	1619.1	1619.1	1619.1	1619.1
2.5°	1627.2	1611.1	1582.8	1556.6	1533.4	1510.1	1496.1	1475.9	1473.8	1473.8	1478.9
5°	1638.3	1612.0	1561.6	1508.2	1446.6	1388.2	1329.6	1273.2	1254.9	1241.8	1247.8
7.5°	1670.5	1629.2	1549.5	1447.6	1330.7	1202.5	1112.7	1015.9	978.6	958.4	961.3
10°	1717.0	1660.5	1539.4	1360.9	1171.2	996.7	868.6	763.6	723.3	706.1	706.1
12.5°	1768.4	1698.8	1521.3	1253.0	996.7	787.9	662.8	614.4	608.3	608.3	608.3
15°	1829.9	1745.3	1490.0	1125.9	814.1	623.4	579.0	581.1	587.1	591.1	591.1
17.5°	1893.5	1794.7	1440.5	983.6	652.7	560.9	561.9	564.9	570.0	574.0	574.0
20°	1962.2	1844.1	1375.0	832.3	559.9	542.7	545.7	548.8	552.8	554.8	555.9
22.5°	2035.8	1890.5	1297.3	684.0	528.6	527.6	528.6	531.7	536.7	536.7	538.7
25°	2114.5	1942.0	1208.6	576.0	512.5	512.5	514.4	516.5	520.5	520.5	521.5
27.5°	2195.1	1989.3	1114.7	519.6	498.4	497.3	497.3	500.4	502.4	503.4	504.4
30°	2283.9	2044.9	1020.9	507.4	487.3	482.2	479.2	481.2	483.2	484.2	486.3
32.5°	2374.7	2098.3	937.2	512.5	476.1	467.1	456.9	455.0	455.0	459.0	462.1
35°	2475.6	2156.8	872.6	529.6	470.1	444.8	428.8	419.6	420.7	426.7	429.8
37.5°	2596.6	2227.4	825.2	544.8	466.1	419.6	393.4	382.3	375.3	382.3	380.3
40°	2755.0	2331.4	790.9	556.9	461.0	390.4	355.1	336.9	323.8	327.9	325.8
42.5°	2988.1	2494.7	777.8	557.9	450.0	356.1	315.8	291.5	272.3	273.4	269.4
45°	3315.0	2753.0	845.4	544.8	425.7	318.8	274.4	242.1	230.0	226.9	222.9
47.5°	3762.8	3129.3	1001.7	517.5	390.4	282.5	234.0	206.8	197.7	192.7	189.6
50°	4363.0	3612.5	1175.3	487.3	355.1	248.2	200.8	183.6	177.5	172.5	171.5
52.5°	5059.1	4102.8	1317.5	456.9	319.8	217.9	179.6	169.4	164.4	160.4	159.4
55°	5697.7	4440.7	1309.4	424.7	285.5	193.7	164.4	158.4	152.3	148.3	146.3
57.5°	6095.2	4488.2	1079.4	389.4	246.1	174.6	150.3	146.3	139.2	134.2	133.1
60°	6277.7	4217.8	756.6	343.0	206.8	156.4	135.2	133.1	124.1	117.1	115.0
62.5°	6311.0	3715.4	504.4	285.5	172.5	139.2	120.0	117.1	105.0	92.8	86.7
65°	6175.8	2997.1	349.0	222.9	147.3	121.1	102.9	96.9	83.7	71.6	67.5
67.5°	5748.1	2104.3	243.1	160.4	125.0	95.8	81.7	79.7	69.6	59.6	56.5
70°	4964.3	1199.5	162.5	120.0	98.9	65.6	64.6	66.6	56.5	48.4	44.4
72.5°	3806.2	548.8	100.9	87.7	67.5	44.4	51.5	52.5	43.4	36.3	32.3
75°	2240.5	235.0	63.6	56.5	34.3	29.2	37.3	38.3	29.2	23.2	20.2
77.5°	762.7	88.8	40.4	33.3	17.1	16.1	24.2	24.2	16.1	9.1	7.1
80°	173.5	33.3	20.2	13.1	8.1	7.1	8.1	7.1	4.0	1.0	0.0
82.5°	49.4	13.1	8.1	5.0	3.1	3.1	1.0	0.0	0.0	0.0	0.0
85°	14.1	6.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)