

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: P960774

Luminaire Tested: **NAV-SB1D-722-U-SL2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960774
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-11)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-722-U-SL2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2200K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6986.4 lumens
Efficiency: N/A
Efficacy: 87.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

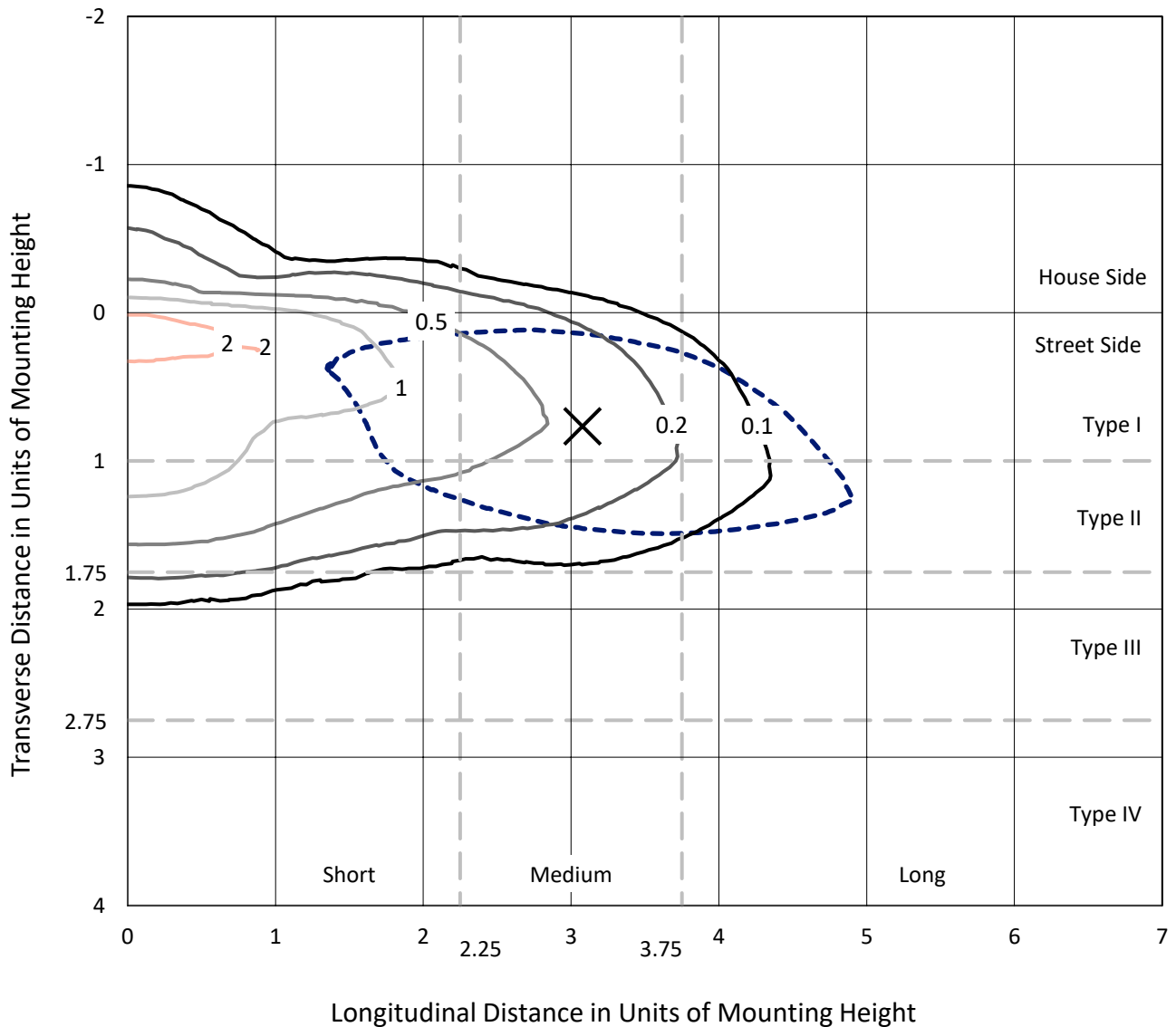
Input Watts (W): 79.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

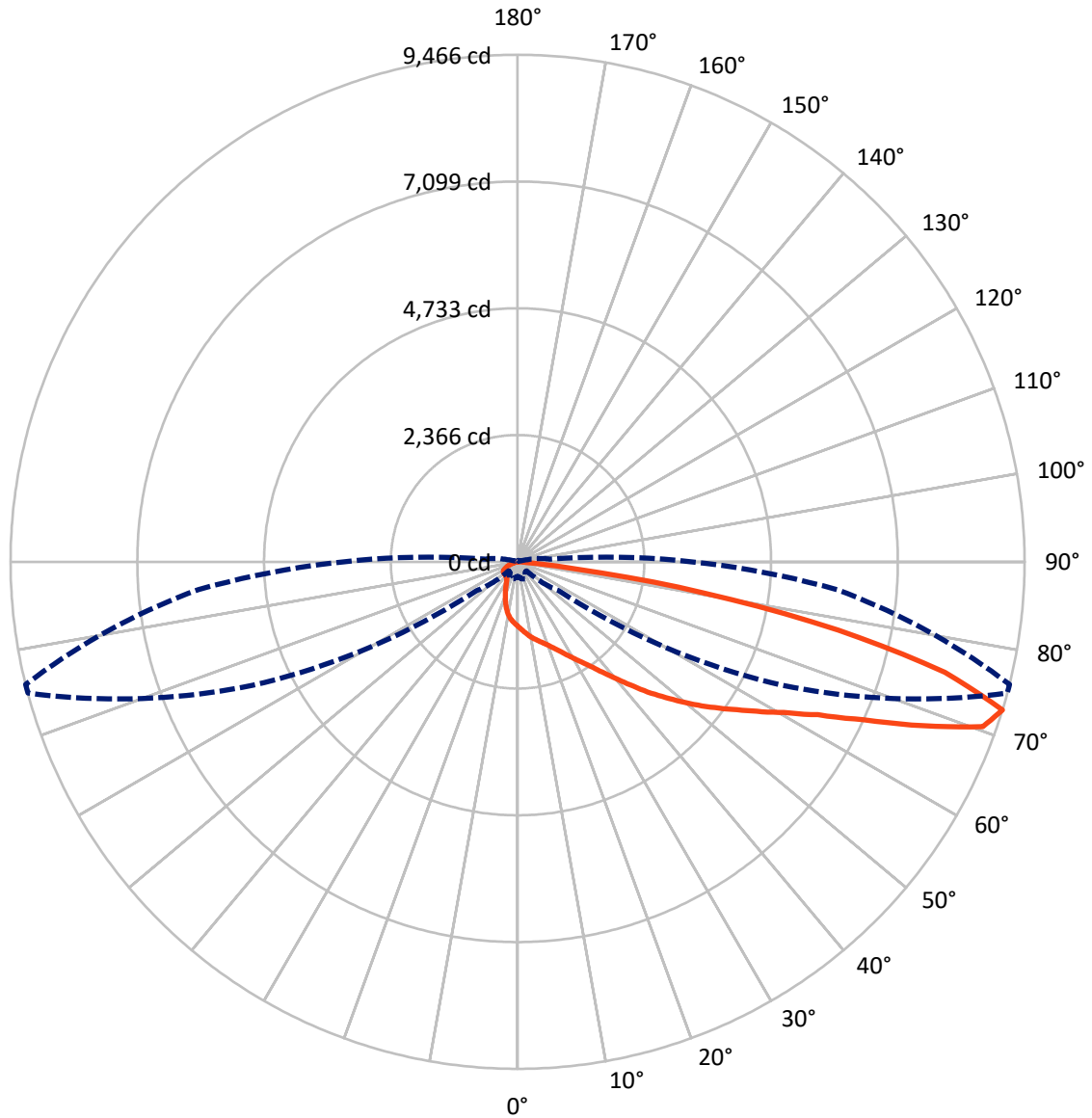
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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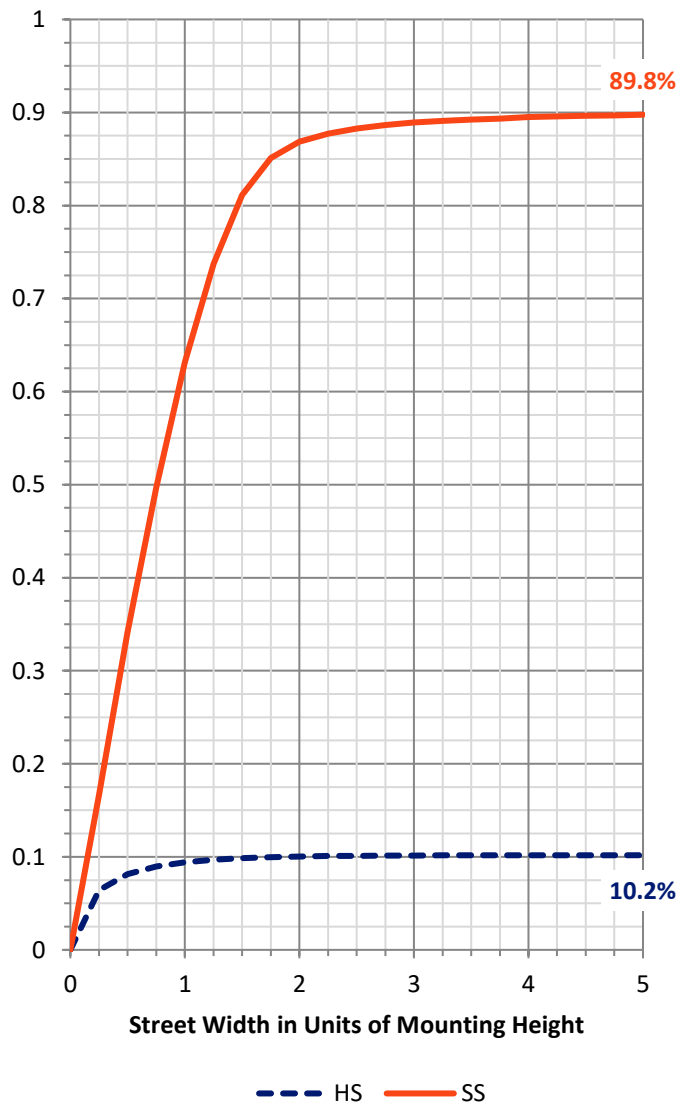
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	715.1	0.0	715.1
	% Fixture	10.2	0.0	10.2
Street Side	Lumens	6271.4	0.0	6271.4
	% Fixture	89.8	0.0	89.8
Total	Lumens	6986.4	0.0	6986.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.8	1.6
10°-20°	294.4	4.2
20°-30°	466.0	6.7
30°-40°	721.0	10.3
40°-50°	1095.0	15.7
50°-60°	1509.6	21.6
60°-70°	1594.8	22.8
70°-80°	1094.0	15.7
80°-90°	101.8	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°	6986.4	100.0
0°-180°	6986.4	100.0

Coefficient of Utilization

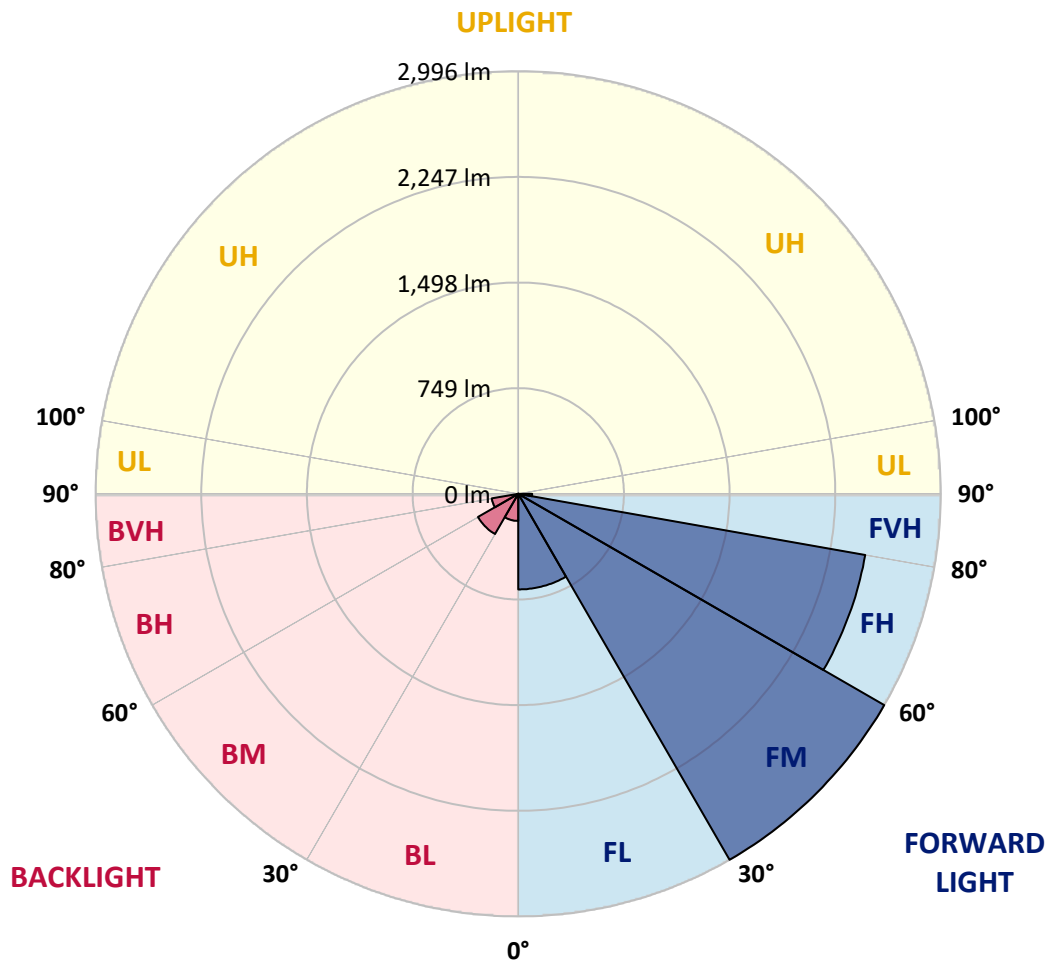


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	678.0	9.7			
FM (30°-60°)	2996.3	42.9			
FH (60°-80°)	2497.9	35.8			G2/5000
FVH (80°-90°)	99.1	1.4			G1/100
BL (0°-30°)	192.2	2.8	B1/500		
BM (30°-60°)	329.2	4.7	B1/1000		
BH (60°-80°)	190.9	2.7	B1/500		G1/500
BVH (80°-90°)	2.8	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-G2
 Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1207.3	1207.3	1207.3	1207.3	1207.3	1207.3	1207.3	1207.3	1207.3	1207.3	1207.3
2.5°	1403.5	1385.0	1388.6	1370.0	1361.4	1340.6	1318.8	1290.3	1258.5	1258.5	1227.7
5°	1551.2	1539.6	1539.6	1517.7	1501.0	1468.3	1429.4	1379.0	1319.3	1313.3	1254.9
7.5°	1641.9	1634.7	1639.2	1626.5	1612.9	1578.9	1532.7	1467.0	1382.2	1375.0	1287.1
10°	1659.6	1659.2	1671.9	1675.5	1684.5	1667.3	1626.1	1550.4	1444.3	1433.9	1314.8
12.5°	1591.2	1582.6	1613.9	1650.6	1702.2	1725.3	1704.1	1626.5	1501.0	1486.5	1340.6
15°	1478.8	1480.6	1510.5	1567.1	1653.2	1735.7	1763.4	1700.9	1558.5	1541.3	1365.0
17.5°	1414.4	1407.6	1433.5	1484.2	1579.4	1695.9	1791.0	1770.2	1619.7	1600.2	1389.9
20°	1406.7	1406.3	1412.1	1435.3	1507.8	1638.8	1787.8	1837.7	1691.8	1669.1	1425.8
22.5°	1460.2	1459.3	1454.3	1449.8	1469.7	1583.0	1774.3	1902.1	1777.9	1753.4	1476.5
25°	1542.2	1540.9	1533.2	1505.5	1486.0	1553.1	1761.6	1961.8	1879.8	1852.7	1538.1
27.5°	1642.4	1641.4	1627.4	1585.8	1535.4	1555.8	1755.2	2023.6	1997.7	1971.0	1609.2
30°	1765.2	1763.4	1734.4	1675.5	1609.8	1598.9	1763.8	2092.8	2120.5	2100.1	1691.4
32.5°	1919.3	1914.3	1876.3	1787.4	1695.5	1656.4	1780.1	2164.0	2266.0	2246.9	1801.0
35°	2038.5	2030.7	2008.6	1930.2	1794.7	1727.1	1818.2	2248.3	2440.9	2424.1	1941.0
37.5°	2140.9	2133.2	2115.1	2050.7	1936.9	1817.3	1879.4	2360.7	2647.6	2639.4	2111.9
40°	2251.5	2238.8	2230.2	2161.3	2058.4	1947.4	1966.9	2492.1	2885.5	2886.4	2317.2
42.5°	2336.7	2331.7	2332.6	2279.6	2175.8	2101.5	2082.9	2640.3	3170.5	3179.1	2564.1
45°	2409.7	2405.6	2422.3	2385.2	2294.1	2202.5	2218.8	2808.0	3482.3	3500.1	2840.6
47.5°	2465.8	2470.4	2494.3	2470.4	2416.8	2273.7	2339.4	2988.8	3810.0	3812.3	3126.1
50°	2522.0	2523.9	2563.7	2551.9	2530.2	2363.9	2450.5	3190.9	4155.3	4159.4	3393.1
52.5°	2539.7	2537.0	2600.4	2629.4	2630.4	2475.4	2594.1	3411.2	4493.9	4507.0	3667.7
55°	2449.0	2456.7	2559.2	2677.0	2723.7	2629.4	2788.1	3689.9	4854.6	4860.0	3939.6
57.5°	2005.8	2048.5	2275.0	2548.4	2784.0	2850.1	3066.8	4015.7	5271.1	5266.1	4215.2
60°	1217.3	1268.0	1539.0	2137.2	2587.3	3071.7	3477.3	4520.7	5726.2	5712.0	4493.9
62.5°	680.7	696.1	782.7	1279.4	1967.8	2930.8	3878.4	5169.2	6337.1	6289.4	4768.1
65°	501.7	506.7	527.1	626.8	967.1	2254.2	3790.6	5944.6	7195.4	7110.6	5096.6
67.5°	435.9	441.0	460.9	474.5	431.9	1184.2	3123.0	6374.7	8285.3	8174.3	5541.3
70°	367.1	369.8	402.0	411.0	309.0	450.5	2006.3	6241.8	9294.1	9214.9	6018.4
72.5°	273.8	284.6	331.3	353.0	247.9	239.3	944.4	5457.4	9465.0	9465.9	5986.2
75°	185.8	195.8	249.3	290.5	191.3	167.7	381.1	4075.1	8241.8	8241.8	5247.6
77.5°	126.9	135.1	173.5	228.0	145.0	115.1	197.6	2586.4	5912.8	6120.9	3740.2
80°	56.2	61.2	111.9	165.4	110.1	74.3	111.9	1416.2	3575.7	3531.7	1466.1
82.5°	27.7	31.7	71.6	103.3	71.1	45.8	58.9	673.4	1158.9	1101.3	228.9
85°	5.4	7.3	38.5	44.0	33.1	20.4	22.2	207.2	139.6	159.5	48.5
87.5°	0.0	0.0	11.8	8.2	3.6	4.5	4.5	18.6	10.9	12.7	12.7
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°	1207.3	1207.3	1207.3	1207.3	1207.3	1207.3	1207.3	1207.3	1207.3	1207.3	1207.3
2.5°	1211.3	1194.6	1157.9	1121.7	1084.4	1050.5	1026.9	1003.4	988.9	982.6	983.4
5°	1220.9	1186.9	1109.9	1029.2	949.5	871.5	813.0	758.2	741.0	712.4	714.2
7.5°	1235.8	1180.6	1059.1	923.1	793.6	679.4	596.9	531.2	504.8	479.5	479.0
10°	1245.8	1168.8	992.0	810.3	634.9	506.7	427.8	380.3	363.1	347.6	347.2
12.5°	1249.9	1147.1	915.0	683.9	493.9	386.1	339.0	316.8	310.9	305.4	305.4
15°	1253.6	1125.8	828.9	562.0	390.2	323.1	304.5	297.2	293.3	289.6	289.6
17.5°	1256.8	1098.6	730.5	456.8	329.4	297.8	288.6	281.0	277.8	273.8	273.8
20°	1267.6	1072.3	642.7	377.1	296.4	279.6	269.7	261.5	258.8	256.0	256.6
22.5°	1288.0	1050.9	557.4	323.1	276.4	261.1	248.4	239.3	237.5	235.6	234.3
25°	1312.4	1024.7	477.2	288.2	257.0	239.7	225.7	218.0	216.2	216.6	215.8
27.5°	1343.7	995.7	408.4	266.0	239.7	219.8	204.0	198.0	199.0	200.8	199.9
30°	1378.2	968.9	354.4	250.6	224.4	202.1	186.2	182.1	185.3	188.1	187.2
32.5°	1429.4	945.4	316.8	238.4	210.7	187.6	175.0	169.9	173.5	177.2	176.3
35°	1499.2	933.6	295.5	228.0	199.0	176.3	163.6	160.0	163.6	164.5	164.1
37.5°	1584.9	932.6	286.4	219.4	188.1	166.8	152.7	151.4	154.1	154.6	153.6
40°	1695.5	938.6	279.6	213.0	176.7	155.9	142.8	141.3	142.3	145.4	145.0
42.5°	1835.5	963.1	270.1	204.8	164.5	145.0	134.6	131.4	131.0	134.6	134.2
45°	2011.3	1017.0	257.4	191.7	153.6	135.9	125.6	121.9	120.5	121.5	122.8
47.5°	2202.9	1083.1	244.8	179.5	146.0	128.7	118.3	113.8	111.5	111.5	111.5
50°	2388.8	1157.9	236.2	166.8	140.5	121.9	110.6	106.1	102.4	101.5	101.1
52.5°	2572.8	1231.3	229.3	154.1	134.2	113.3	103.3	98.3	94.3	92.5	91.5
55°	2740.4	1301.1	217.5	141.9	126.0	104.2	96.0	91.1	86.1	82.9	81.6
57.5°	2901.4	1359.1	195.8	129.1	113.3	95.6	88.4	82.9	77.1	73.0	71.1
60°	3047.7	1389.1	168.6	115.5	100.7	86.5	79.7	74.8	67.0	60.3	58.4
62.5°	3159.3	1377.3	139.1	100.1	87.4	78.4	69.8	64.8	55.8	47.6	44.4
65°	3273.4	1312.9	111.0	83.8	76.6	67.5	58.4	53.5	43.0	34.4	32.2
67.5°	3421.7	1175.6	87.4	69.8	66.2	53.5	45.8	42.6	35.4	27.2	25.4
70°	3516.8	913.2	68.0	56.7	54.4	38.9	35.4	34.8	28.1	20.8	18.6
72.5°	3255.7	598.7	52.1	43.0	38.9	25.4	27.2	27.2	20.4	14.0	12.2
75°	2717.8	350.3	37.6	30.9	22.2	16.3	18.6	18.6	12.7	6.8	5.4
77.5°	1941.0	186.8	24.9	19.1	11.4	7.3	9.9	9.5	4.1	0.4	0.0
80°	742.3	64.4	11.8	7.7	3.2	1.3	0.9	0.4	0.4	0.0	0.0
82.5°	113.3	16.8	2.3	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	20.4	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.5	0.0	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)