

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: P960778

Luminaire Tested: **NAV-SB1D-722-U-SL4-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960778
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-722-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2200K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6016.8 lumens
Efficiency: N/A
Efficacy: 75.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

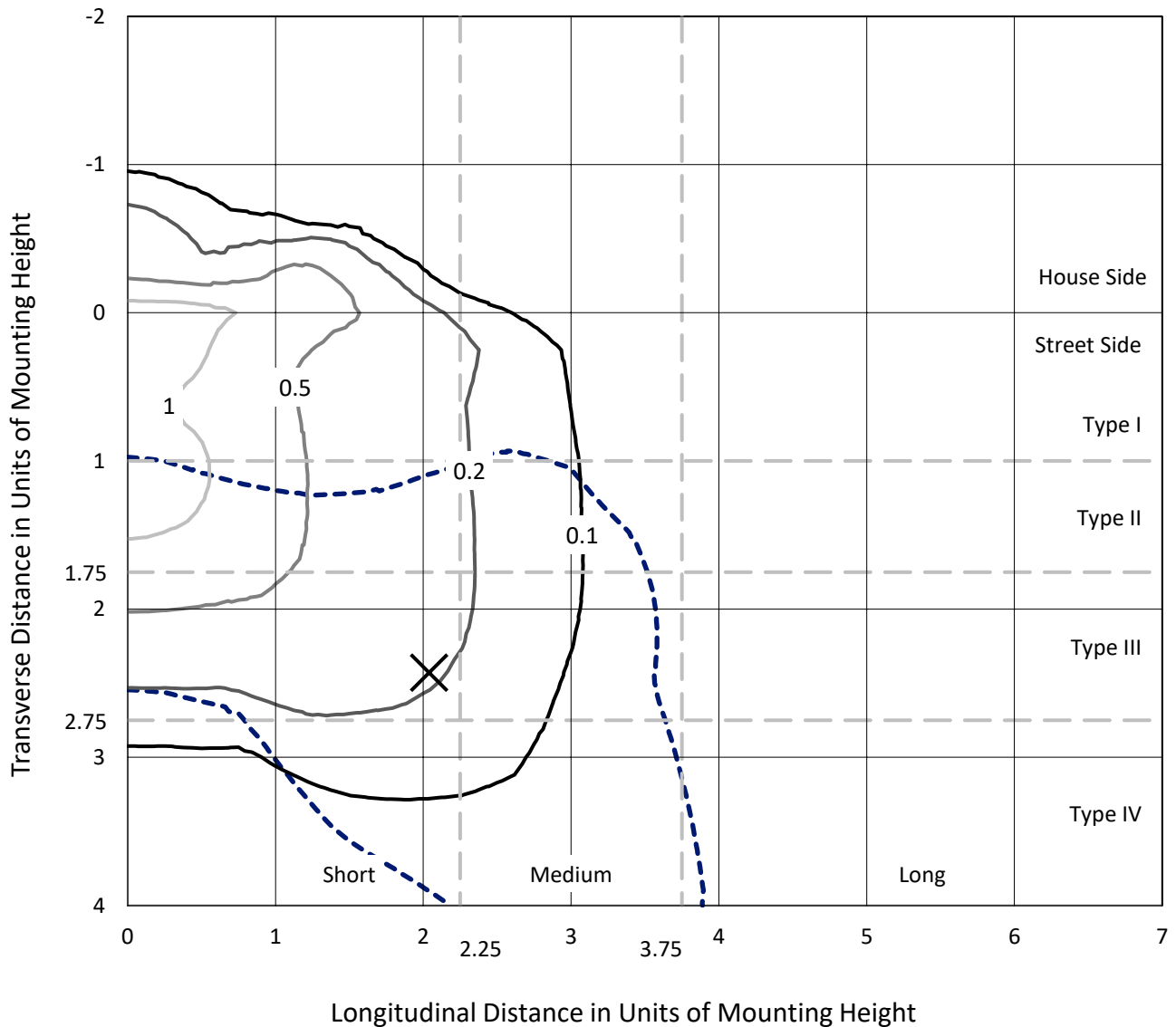
Input Watts (W): 79.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

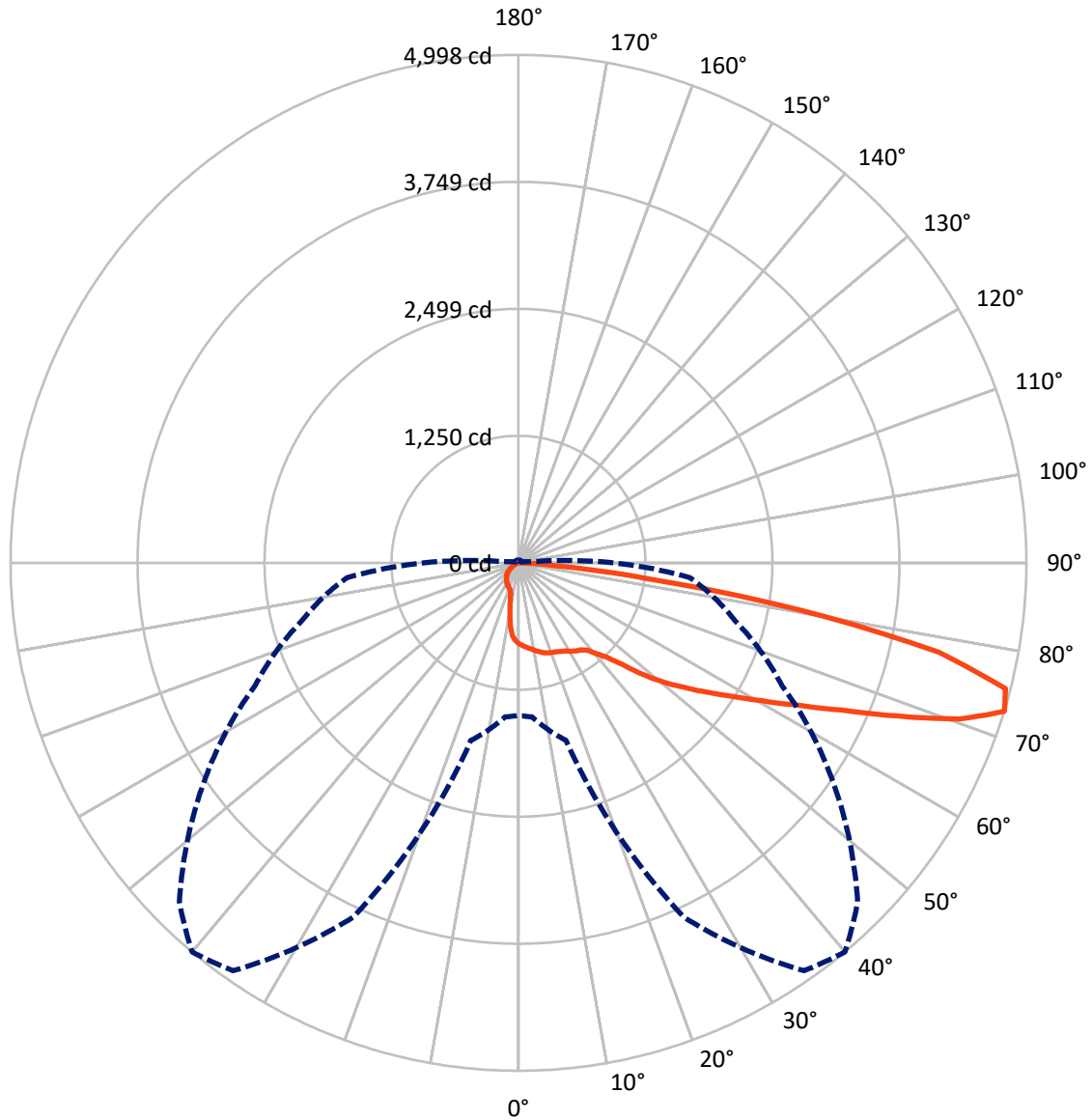
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 fc
 Type IV - Short - N/A

REPORT NUMBER: P960778
CATALOG NUMBER: NAV-SB1D-722-U-SL4-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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 CATALOG NUMBER: NAV-SB1D-722-U-SL4-HSS

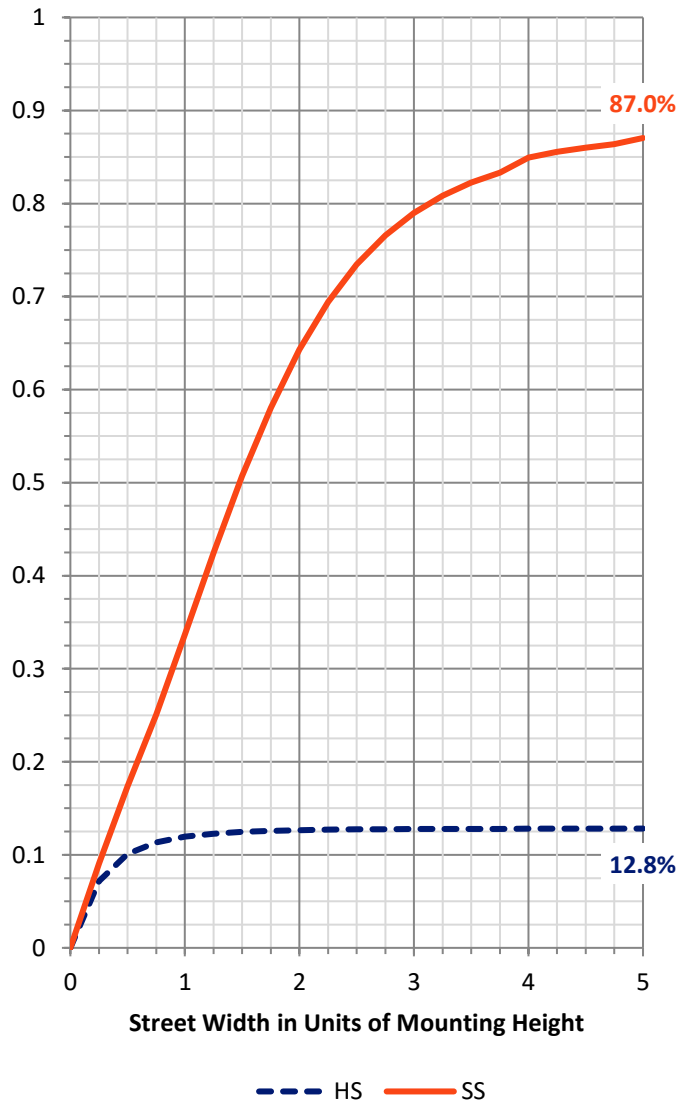
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	777.0	0.0	777.0
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	5239.7	0.0	5239.7
	% Fixture	87.1	0.0	87.1
Total	Lumens	6016.8	0.0	6016.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.8	1.2
10°-20°	197.6	3.3
20°-30°	319.7	5.3
30°-40°	472.0	7.8
40°-50°	794.4	13.2
50°-60°	1233.5	20.5
60°-70°	1543.4	25.7
70°-80°	1263.6	21.0
80°-90°	119.8	2.0
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°	6016.8	100.0
0°-180°	6016.8	100.0

Coefficient of Utilization

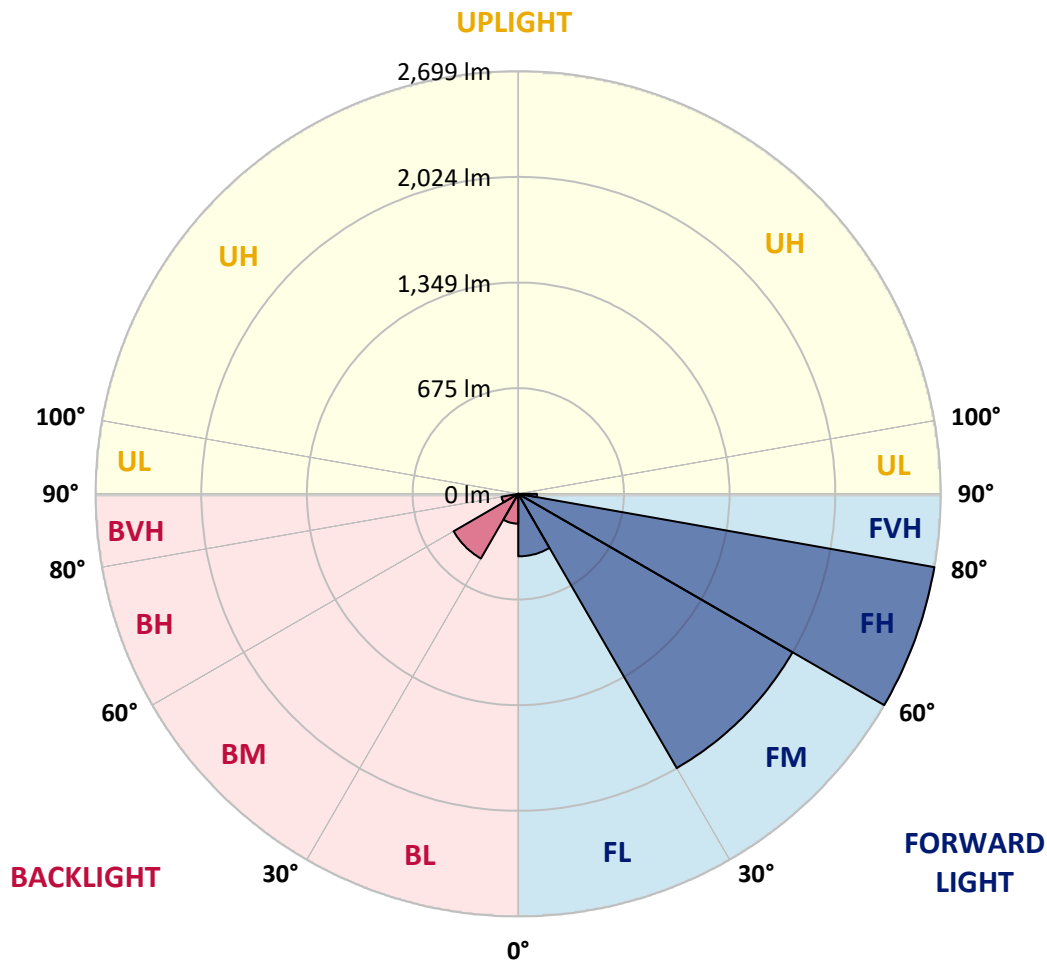


REPORT NUMBER: P960778
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	399.3	6.6			
FM (30°-60°)	2022.7	33.6			
FH (60°-80°)	2698.8	44.9			G2/5000
FVH (80°-90°)	118.9	2.0			G2/225
BL (0°-30°)	190.7	3.2	B1/500		
BM (30°-60°)	477.1	7.9	B1/1000		
BH (60°-80°)	108.2	1.8	B0/110		G0/110
BVH (80°-90°)	0.9	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-G2
 Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	796.6	796.6	796.6	796.6	796.6	796.6	796.6	796.6	796.6	796.6	796.6
2.5°	820.7	823.9	822.0	818.5	817.5	815.7	813.4	812.5	809.3	806.7	803.5
5°	843.8	847.0	844.7	839.7	837.4	835.2	832.0	829.3	823.0	817.0	809.9
7.5°	869.2	871.9	869.2	861.9	858.3	855.6	851.1	847.0	839.7	831.1	822.0
10°	897.3	899.5	895.4	885.9	880.1	876.0	871.9	867.4	860.6	851.1	840.2
12.5°	923.5	926.3	919.9	908.6	901.8	897.7	893.2	889.6	882.7	873.7	862.3
15°	947.6	951.6	940.7	928.5	920.9	917.7	913.2	910.8	906.3	900.0	889.6
17.5°	965.7	968.4	957.0	942.6	934.0	931.7	928.5	929.9	929.0	925.8	919.0
20°	981.1	982.9	968.0	950.3	940.7	941.3	940.3	944.8	946.7	946.7	946.2
22.5°	1000.1	1000.6	981.5	959.4	948.0	951.2	952.5	957.6	961.1	964.8	972.9
25°	1025.1	1024.2	1001.5	971.1	961.1	965.7	968.8	970.7	974.8	980.6	999.3
27.5°	1062.2	1059.5	1030.5	990.1	978.4	982.5	988.3	987.5	985.6	990.1	1021.4
30°	1109.4	1105.8	1067.2	1016.9	1006.0	1009.6	1011.5	1003.3	990.1	994.2	1040.9
32.5°	1184.1	1177.8	1124.3	1046.8	1030.0	1034.1	1031.9	1015.1	995.6	999.7	1060.4
35°	1314.2	1298.8	1223.1	1109.4	1057.3	1052.7	1047.2	1030.9	1007.0	1002.9	1076.8
37.5°	1590.6	1563.4	1434.3	1231.2	1118.9	1089.4	1072.7	1056.4	1019.2	1002.9	1095.3
40°	1902.4	1874.7	1725.7	1435.2	1221.3	1171.5	1131.6	1086.2	1031.9	1008.7	1124.3
42.5°	2227.7	2197.4	2044.3	1688.1	1367.7	1265.3	1190.9	1110.3	1052.7	1026.8	1162.9
45°	2591.2	2553.2	2352.9	1951.8	1580.1	1421.2	1286.6	1159.7	1089.0	1059.0	1215.3
47.5°	2974.5	2925.1	2660.5	2207.8	1809.0	1636.8	1461.4	1248.0	1142.5	1107.1	1286.6
50°	3314.4	3265.5	2978.2	2475.7	2022.9	1842.1	1660.8	1370.4	1222.6	1175.1	1382.1
52.5°	3558.7	3521.6	3267.3	2752.1	2245.5	2034.7	1841.6	1512.7	1324.2	1262.1	1495.0
55°	3722.3	3688.4	3472.2	3014.0	2504.2	2246.8	2019.8	1667.2	1446.5	1366.3	1619.6
57.5°	3821.5	3802.0	3620.3	3247.8	2760.7	2478.9	2223.7	1837.1	1590.6	1489.1	1758.7
60°	3856.9	3841.1	3712.3	3470.8	3070.7	2757.6	2463.4	2028.8	1765.6	1628.7	1901.5
62.5°	3762.7	3765.8	3778.5	3735.0	3397.4	3083.8	2750.7	2259.0	1959.5	1786.9	2035.6
65°	3319.0	3345.3	3586.4	4027.7	3830.1	3492.6	3116.4	2540.0	2181.5	1966.8	2142.1
67.5°	2748.0	2786.1	3086.1	4199.0	4291.5	4023.2	3625.8	2898.0	2446.2	2149.8	2182.4
70°	2103.6	2144.4	2507.9	4163.2	4723.3	4603.3	4255.7	3353.4	2720.4	2276.7	2079.6
72.5°	1501.3	1522.2	1808.6	3844.7	4900.5	4998.4	4719.7	3784.8	2860.4	2206.5	1696.2
75°	1054.9	1051.3	1241.2	3096.0	4624.6	4950.3	4557.0	3551.4	2588.5	1752.9	1045.9
77.5°	459.5	460.4	619.9	1880.2	3691.0	4228.0	3788.0	2224.6	1804.5	929.0	441.4
80°	119.2	122.8	227.4	748.7	2222.3	2790.6	2310.2	978.0	833.8	226.6	84.3
82.5°	42.1	44.9	104.7	235.2	819.8	1279.7	1028.7	312.7	217.5	64.8	22.7
85°	12.2	14.5	56.2	72.1	169.5	361.6	249.7	60.7	53.5	33.5	5.8
87.5°	0.0	1.8	11.4	9.9	9.9	6.8	12.7	6.8	8.6	4.1	1.8
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: P960778
 CATALOG NUMBER: NAV-SB1D-722-U-SL4-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	796.6	796.6	796.6	796.6	796.6	796.6	796.6	796.6	796.6	796.6	796.6
2.5°	800.7	797.6	790.8	783.5	776.7	770.4	768.5	761.8	758.6	759.0	758.6
5°	804.8	798.9	785.8	770.0	753.6	735.0	719.7	697.9	679.3	677.0	675.7
7.5°	815.7	806.2	784.8	754.1	713.3	662.0	614.5	567.3	540.6	526.1	525.2
10°	832.5	819.8	787.2	728.3	641.6	550.1	478.1	418.7	388.4	374.3	371.6
12.5°	852.4	838.3	790.8	684.3	549.2	429.2	351.2	315.0	308.6	307.7	307.3
15°	880.5	865.1	794.9	624.9	449.1	326.8	290.9	291.4	296.3	299.1	298.7
17.5°	911.7	896.4	788.9	552.4	350.3	279.1	278.3	282.3	289.6	292.3	291.8
20°	943.5	929.0	768.1	467.2	283.2	266.0	269.7	274.2	281.5	285.1	285.1
22.5°	976.1	963.4	735.0	376.6	255.6	256.5	261.1	265.6	273.7	277.8	277.8
25°	1011.1	1000.1	691.1	301.8	243.8	246.5	252.5	257.9	266.5	271.4	271.4
27.5°	1046.3	1038.2	641.2	251.9	232.9	236.1	242.9	250.1	258.7	264.7	265.1
30°	1084.9	1080.4	601.4	233.4	222.5	225.2	232.9	241.1	250.6	257.9	258.7
32.5°	1124.3	1123.4	581.9	247.0	213.0	214.8	221.6	229.8	241.5	250.6	251.5
35°	1163.3	1165.1	570.5	285.5	209.8	204.8	209.4	216.6	230.6	242.0	243.8
37.5°	1213.1	1217.7	570.1	327.2	217.5	194.9	198.0	203.1	215.2	228.4	230.6
40°	1287.4	1311.5	599.1	363.0	231.1	185.8	186.8	187.6	193.9	204.8	208.5
42.5°	1386.2	1456.5	703.8	387.4	236.6	177.6	174.5	169.5	168.6	174.5	177.6
45°	1509.0	1631.9	887.8	401.1	231.1	168.6	160.0	146.8	141.9	146.0	146.0
47.5°	1653.6	1824.0	1105.8	404.3	222.0	157.2	141.9	124.6	120.5	121.9	121.5
50°	1794.6	1968.1	1297.4	377.9	207.0	142.8	121.9	107.4	104.7	105.2	105.2
52.5°	1919.2	2017.5	1351.8	315.9	187.2	125.0	104.7	94.7	92.9	92.9	92.5
55°	2001.6	1964.0	1205.4	241.5	162.3	106.9	89.7	84.8	83.8	83.3	82.5
57.5°	2018.8	1790.0	910.4	174.5	126.9	90.2	79.7	77.1	75.2	73.4	72.5
60°	1957.2	1500.0	579.6	121.9	95.1	77.1	70.7	68.9	65.3	61.6	60.3
62.5°	1824.0	1132.9	320.8	84.8	76.6	65.7	62.5	60.3	53.5	47.6	45.8
65°	1645.0	753.2	141.9	66.1	62.5	55.2	53.5	50.3	42.1	35.4	34.0
67.5°	1465.1	433.7	63.9	53.0	50.3	45.3	44.0	41.7	35.8	29.4	28.6
70°	1259.8	219.8	44.0	42.1	38.9	34.4	35.8	35.4	29.4	24.0	23.1
72.5°	938.1	109.2	33.1	31.7	28.1	24.5	29.4	29.0	23.1	18.1	17.2
75°	531.2	53.9	24.0	22.2	16.8	18.1	23.6	22.2	15.9	11.8	10.9
77.5°	210.7	27.7	15.9	13.6	9.9	12.2	17.2	15.0	8.2	5.0	4.5
80°	48.5	13.6	8.2	5.8	4.5	7.3	9.0	5.4	2.3	0.4	0.0
82.5°	13.6	5.8	2.8	2.3	2.3	2.8	2.3	0.9	0.0	0.0	0.0
85°	4.5	2.8	0.9	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0
87.5°	1.8	0.9	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)