

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: P960819

Luminaire Tested: **NAV-SB1D-727-U-T2U-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P960819  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1D-727-U-T2U-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2700K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

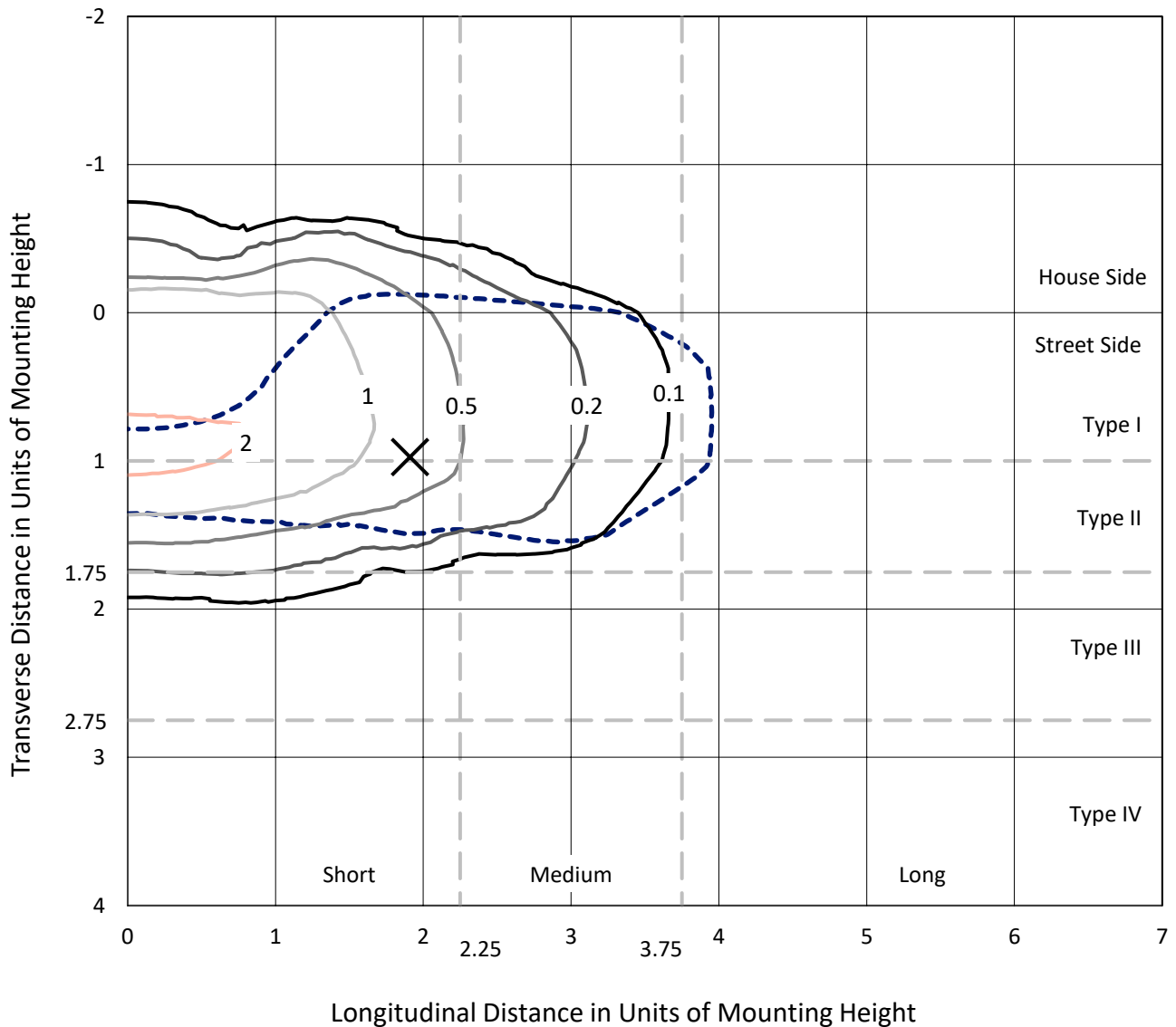
Lumens per Lamp: N/A  
Luminaire Lumens: 7396.4 lumens  
Efficiency: N/A  
Efficacy: 92.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 79.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
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



REPORT NUMBER: P960819  
 CATALOG NUMBER: NAV-SB1D-727-U-T2U-HSS

### Iso-Footcandle Lines of Horizontal Illumination

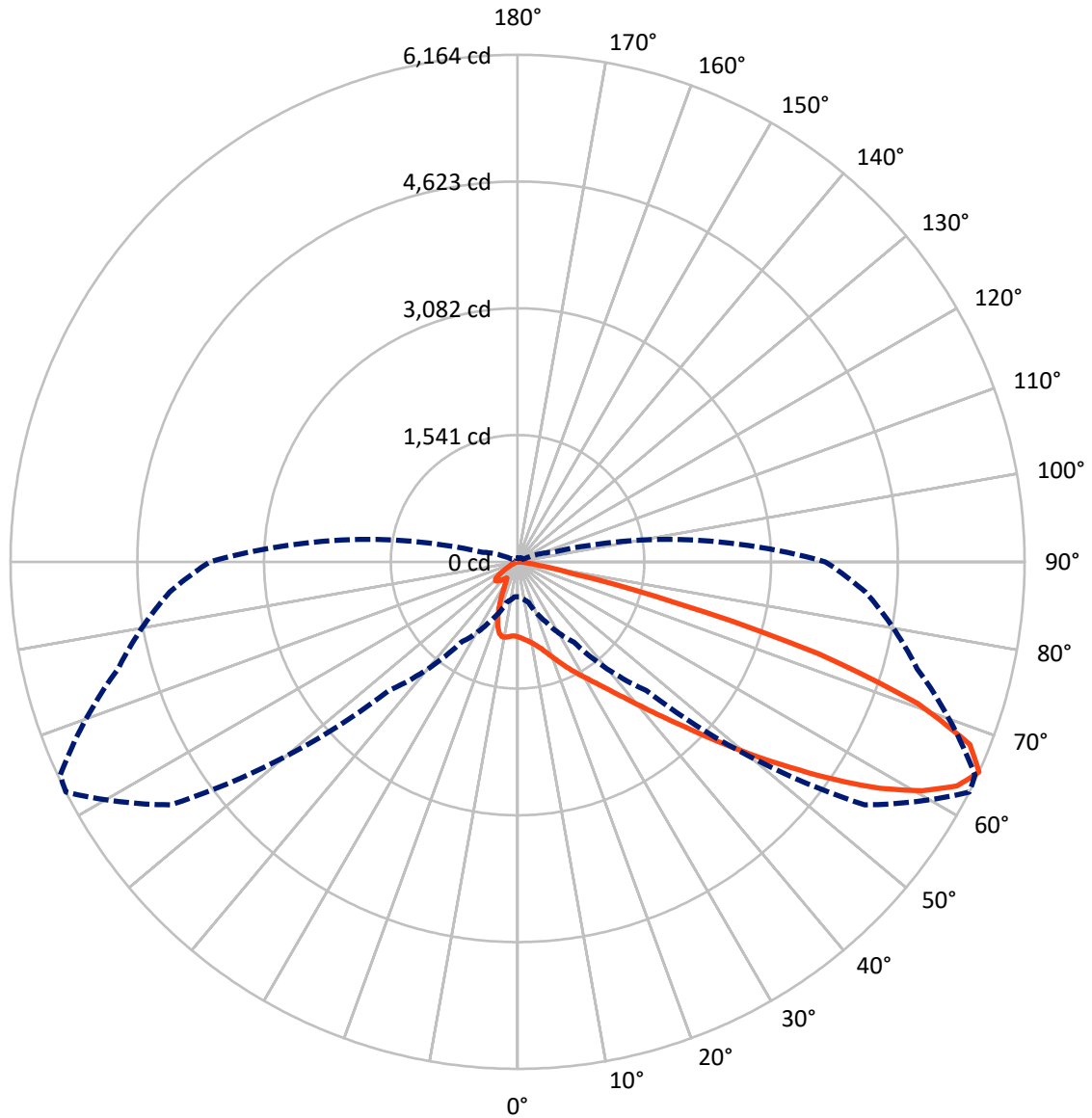
✕ Max cd  
 - - - 1/2 Max cd



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

REPORT NUMBER: P960819  
CATALOG NUMBER: NAV-SB1D-727-U-T2U-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P960819  
 CATALOG NUMBER: NAV-SB1D-727-U-T2U-HSS

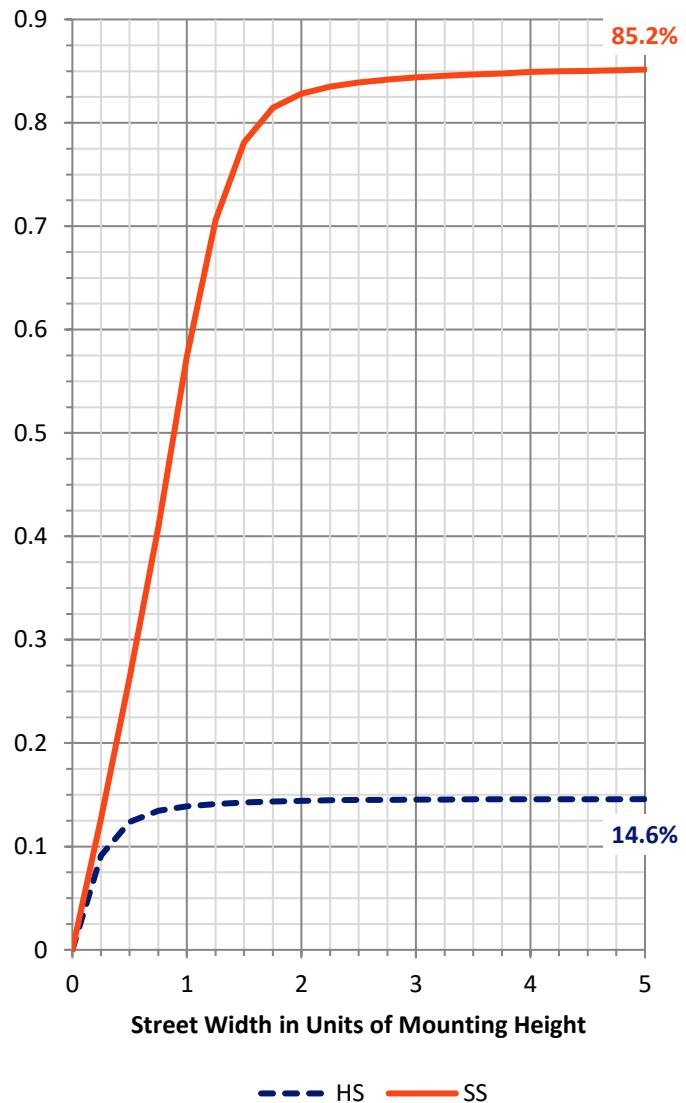
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1087.2	0.0	1087.2
	% Fixture	14.7	0.0	14.7
<b>Street Side</b>	Lumens	6309.2	0.0	6309.2
	% Fixture	85.3	0.0	85.3
<b>Total</b>	Lumens	7396.4	0.0	7396.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.0	1.2
10°-20°	238.6	3.2
20°-30°	415.5	5.6
30°-40°	749.0	10.1
40°-50°	1485.4	20.1
50°-60°	2023.4	27.4
60°-70°	1615.1	21.8
70°-80°	730.8	9.9
80°-90°	52.5	0.7
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°	7396.4	100.0
0°-180°	7396.4	100.0

**Coefficient of Utilization**

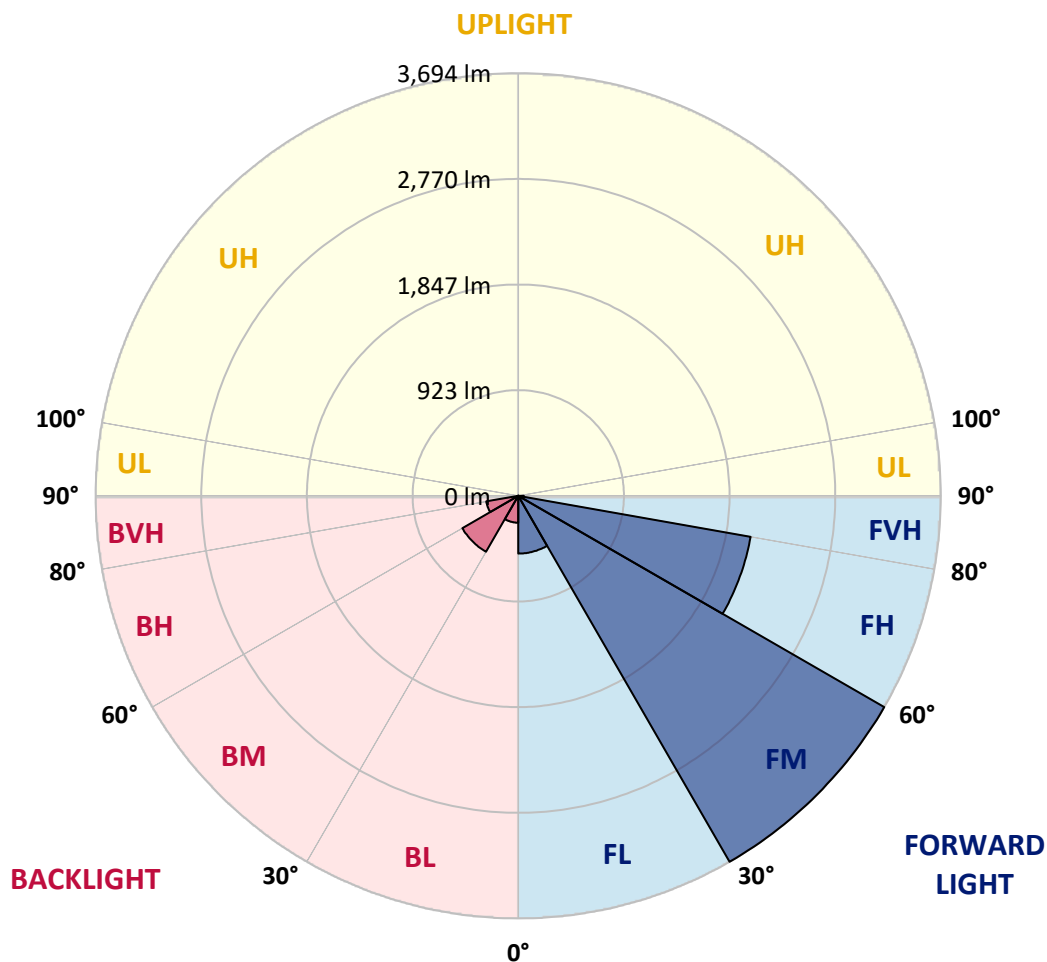


REPORT NUMBER: P960819  
 CATALOG NUMBER: NAV-SB1D-727-U-T2U-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	504.9	6.8			
FM (30°-60°)	3693.6	49.9			
FH (60°-80°)	2062.1	27.9			G2/5000
FVH (80°-90°)	48.6	0.7			G1/100
BL (0°-30°)	235.3	3.2	B1/500		
BM (30°-60°)	564.2	7.6	B1/1000		
BH (60°-80°)	283.8	3.8	B1/500		G1/500
BVH (80°-90°)	3.9	0.1			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 Short



REPORT NUMBER: P960819  
 CATALOG NUMBER: NAV-SB1D-727-U-T2U-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	912.9	912.9	912.9	912.9	912.9	912.9	912.9	912.9	912.9	912.9	912.9
2.5°	934.2	931.7	935.2	933.7	932.7	930.7	929.7	928.6	926.6	925.1	918.9
5°	936.7	935.2	938.8	941.9	944.9	947.9	949.5	951.5	949.5	945.5	939.3
7.5°	915.4	914.4	922.0	931.2	944.9	956.6	969.3	976.4	976.9	975.5	968.8
10°	913.9	911.3	918.9	930.2	947.9	968.8	991.2	1006.4	1008.5	1015.2	1008.0
12.5°	937.8	935.2	946.0	958.2	976.4	998.4	1025.8	1047.1	1050.2	1059.4	1054.3
15°	978.0	974.5	986.7	1002.4	1025.8	1050.7	1079.7	1099.1	1101.7	1112.8	1103.7
17.5°	1024.8	1021.2	1035.5	1052.3	1077.7	1111.8	1145.4	1166.8	1169.8	1176.9	1160.2
20°	1084.9	1080.2	1091.4	1106.7	1133.6	1174.4	1214.6	1245.2	1244.7	1244.7	1217.2
22.5°	1154.6	1147.4	1157.1	1169.3	1194.7	1244.1	1297.5	1333.6	1333.6	1319.4	1274.2
25°	1229.4	1222.2	1232.9	1244.1	1266.5	1322.5	1385.1	1429.9	1431.8	1407.4	1335.2
27.5°	1323.0	1313.8	1321.9	1335.2	1348.4	1405.4	1479.7	1531.6	1532.6	1495.0	1393.2
30°	1503.1	1477.1	1451.7	1437.5	1443.6	1500.1	1579.4	1636.9	1642.0	1590.1	1456.3
32.5°	1832.8	1827.8	1738.2	1621.1	1560.0	1601.9	1690.8	1760.0	1763.1	1696.5	1538.2
35°	2345.2	2339.2	2195.1	1972.3	1773.2	1738.2	1826.2	1908.1	1906.1	1830.8	1644.6
37.5°	2956.8	2951.3	2761.5	2463.3	2141.2	1944.2	2000.8	2086.7	2099.5	2000.8	1782.0
40°	3479.5	3458.6	3338.5	3051.0	2629.6	2286.2	2249.1	2306.0	2319.3	2202.2	1956.5
42.5°	3875.3	3857.5	3796.4	3616.8	3221.0	2792.0	2541.7	2563.5	2578.3	2437.9	2157.0
45°	4080.4	4076.3	4100.7	4083.9	3823.5	3412.7	2959.9	2868.9	2874.4	2698.9	2384.5
47.5°	4109.3	4107.4	4218.8	4376.5	4341.4	4112.9	3496.7	3249.5	3229.6	2993.5	2631.7
50°	3938.4	3934.4	4148.1	4443.7	4687.4	4701.2	4106.4	3678.4	3634.6	3298.2	2889.7
52.5°	3392.4	3391.4	3742.5	4234.6	4809.0	5216.1	4708.7	4149.6	4076.3	3620.9	3162.4
55°	2610.4	2629.1	3031.6	3613.2	4587.2	5463.9	5249.6	4672.7	4560.2	3945.5	3413.8
57.5°	1849.1	1876.6	2274.5	2792.5	3899.2	5317.4	5615.6	5196.8	5075.7	4269.1	3668.7
60°	993.2	1017.7	1416.1	2034.3	2900.9	4770.9	5808.4	5651.6	5537.2	4576.5	3898.7
62.5°	591.7	599.9	764.8	1313.3	1962.1	3644.8	5726.5	5998.2	5904.0	4834.5	4098.7
65°	424.9	426.4	509.3	802.0	1191.2	2214.5	5152.0	6164.0	6135.0	5028.9	4246.8
67.5°	357.7	356.7	391.3	532.8	811.6	1109.3	3948.6	5929.5	6052.6	5152.0	4330.7
70°	306.8	308.3	349.0	390.3	610.1	627.9	1963.1	5162.7	5425.2	5184.6	4325.6
72.5°	228.5	233.6	271.2	355.7	460.5	432.0	677.7	3828.0	4302.7	4884.8	4101.2
75°	161.3	163.8	190.9	299.2	343.5	314.5	346.0	1978.9	2587.4	3745.0	3356.8
77.5°	124.1	128.7	144.5	209.1	338.4	220.8	211.7	684.9	1052.3	2262.3	2301.4
80°	67.1	75.3	104.3	151.1	237.6	156.2	104.9	272.8	356.7	1057.9	887.4
82.5°	34.6	38.6	72.8	108.9	135.3	136.3	51.9	113.5	147.1	326.7	121.6
85°	13.7	16.8	48.9	60.1	69.7	67.1	23.4	45.8	52.9	90.6	37.1
87.5°	3.1	5.1	17.8	13.7	13.2	14.2	5.6	10.7	10.1	10.7	6.7
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: P960819  
 CATALOG NUMBER: NAV-SB1D-727-U-T2U-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	912.9	912.9	912.9	912.9	912.9	912.9	912.9	912.9	912.9	912.9	912.9
2.5°	918.5	916.5	910.8	904.7	897.6	893.5	890.9	890.4	886.9	884.4	886.9
5°	933.7	931.7	921.0	908.3	894.5	883.9	873.7	864.5	851.3	848.7	847.7
7.5°	964.2	958.7	941.4	924.0	898.1	867.0	829.4	786.2	747.5	735.7	730.2
10°	1001.9	994.2	972.4	941.9	884.4	799.9	708.8	624.3	557.2	538.3	531.3
12.5°	1044.7	1038.0	1009.0	952.5	826.9	673.7	534.2	429.5	364.3	348.1	343.5
15°	1095.5	1085.9	1045.7	936.2	724.1	511.9	366.8	304.8	281.4	278.3	275.3
17.5°	1149.4	1133.6	1078.2	877.7	585.7	363.8	283.4	265.6	255.4	252.4	250.8
20°	1198.8	1178.4	1097.6	789.2	437.6	283.4	253.9	242.2	233.1	229.5	227.4
22.5°	1248.1	1219.1	1097.6	668.6	328.2	251.3	233.1	222.3	211.7	207.0	204.6
25°	1299.6	1260.9	1078.2	534.2	264.0	230.5	213.2	201.5	192.3	186.8	184.7
27.5°	1349.4	1296.0	1033.9	407.0	235.0	212.2	194.9	183.7	175.1	171.0	171.0
30°	1396.8	1330.7	971.9	308.8	216.3	194.3	178.0	168.4	159.8	155.7	156.2
32.5°	1460.8	1374.4	905.7	253.4	200.0	177.6	162.9	153.6	146.1	143.0	143.0
35°	1549.9	1439.0	848.7	248.9	186.2	163.8	149.1	140.4	132.8	130.3	130.3
37.5°	1676.1	1543.3	818.8	279.3	175.1	151.6	137.9	128.7	121.6	119.6	119.1
40°	1831.8	1684.8	835.0	309.9	167.4	140.9	127.7	118.6	112.4	109.9	109.4
42.5°	2016.5	1859.2	925.1	333.3	162.4	131.8	118.1	107.8	103.8	102.8	102.8
45°	2228.8	2051.1	1062.9	358.2	154.2	123.1	108.3	100.8	97.7	97.2	96.7
47.5°	2469.9	2261.8	1222.7	389.3	146.1	115.0	100.8	95.6	93.1	92.1	92.1
50°	2709.1	2473.9	1387.1	406.5	139.4	107.3	94.6	90.6	88.6	88.0	88.0
52.5°	2959.4	2692.3	1519.9	390.3	133.9	101.3	89.6	86.5	84.5	83.9	83.9
55°	3198.0	2868.9	1542.8	331.3	122.6	95.1	83.9	82.4	79.8	79.8	79.3
57.5°	3403.6	2957.3	1381.0	243.2	111.4	86.0	78.3	76.9	74.8	74.3	73.8
60°	3592.4	2931.9	1066.0	163.8	99.2	76.9	71.2	70.2	68.2	65.6	65.1
62.5°	3698.7	2820.0	729.2	106.8	87.0	67.1	63.1	62.6	58.0	52.9	51.9
65°	3738.9	2590.0	454.9	77.9	72.8	57.5	54.4	53.4	46.8	41.2	40.7
67.5°	3703.8	2211.4	229.5	61.6	57.5	47.9	44.8	44.8	40.2	35.2	34.6
70°	3563.4	1657.8	96.7	49.4	44.3	36.6	36.6	38.6	34.1	28.5	28.0
72.5°	3258.6	1115.4	51.4	37.6	33.1	25.9	30.0	31.6	27.0	21.3	21.3
75°	2590.5	680.3	35.6	28.0	20.9	18.3	22.9	23.9	18.3	14.2	13.7
77.5°	1771.8	390.8	23.9	17.8	13.2	10.7	15.8	14.8	9.6	6.7	7.1
80°	778.0	162.9	13.7	8.1	5.1	4.1	5.6	4.1	3.1	2.0	2.0
82.5°	91.1	38.1	5.1	3.1	2.0	1.0	0.5	0.0	0.0	0.0	0.0
85°	18.9	4.6	2.6	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.6	1.0	0.5	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)