

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: P881709

Luminaire Tested: **NAV-SB1B-727-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881709
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-727-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5111 lumens
Efficiency: N/A
Efficacy: 128.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

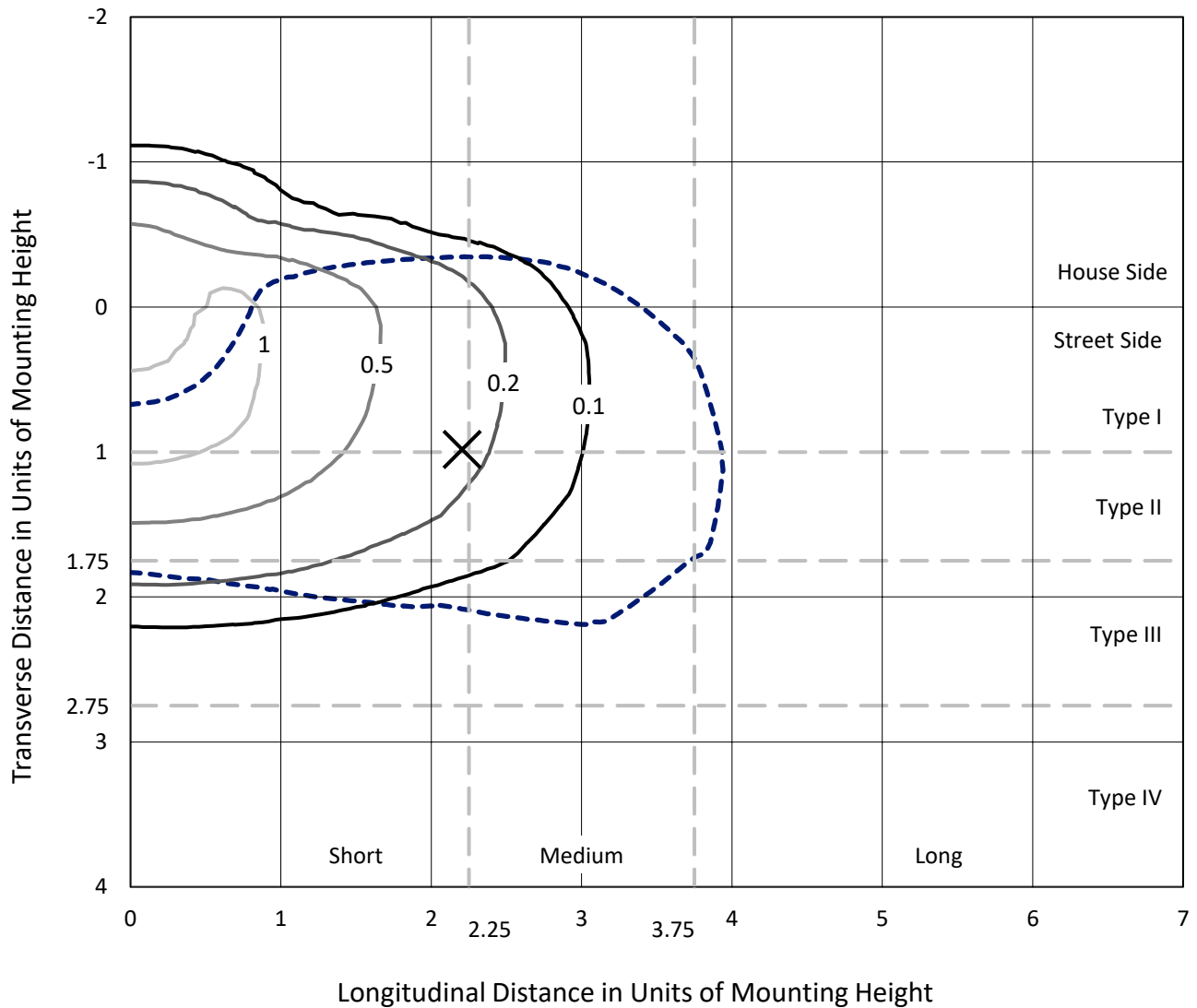
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

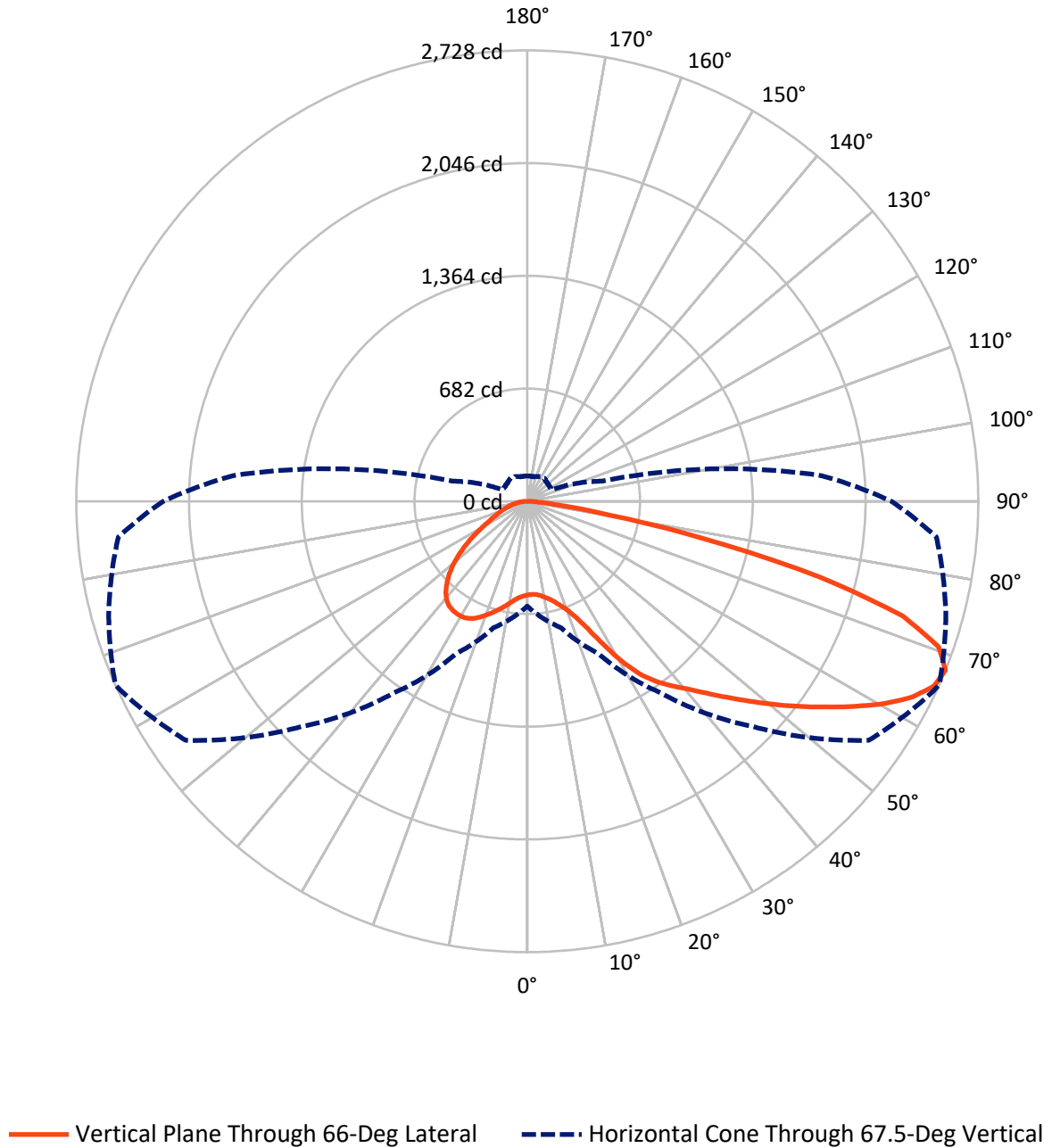
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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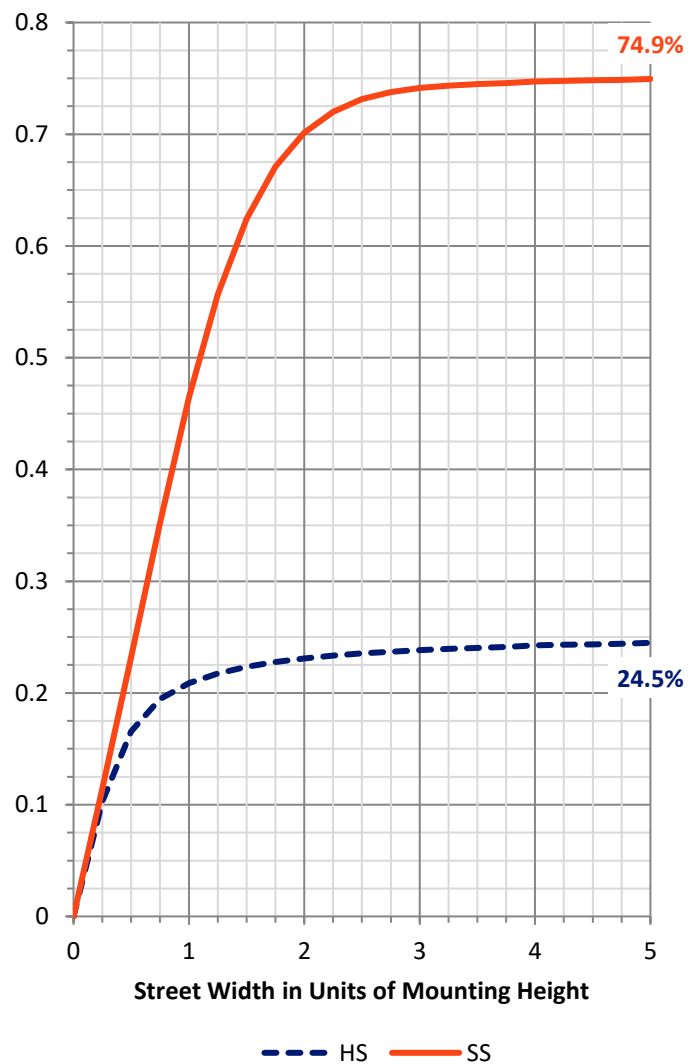
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1270.8	0.0	1270.8
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	3840.2	0.0	3840.2
	% Fixture	75.1	0.0	75.1
Total	Lumens	5111.0	0.0	5111.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.2	1.1
10°-20°	185.7	3.6
20°-30°	357.9	7.0
30°-40°	627.5	12.3
40°-50°	932.9	18.3
50°-60°	1182.6	23.1
60°-70°	1157.1	22.6
70°-80°	552.0	10.8
80°-90°	59.0	1.2
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°	5111.0	100.0
0°-180°	5111.0	100.0

Coefficient of Utilization



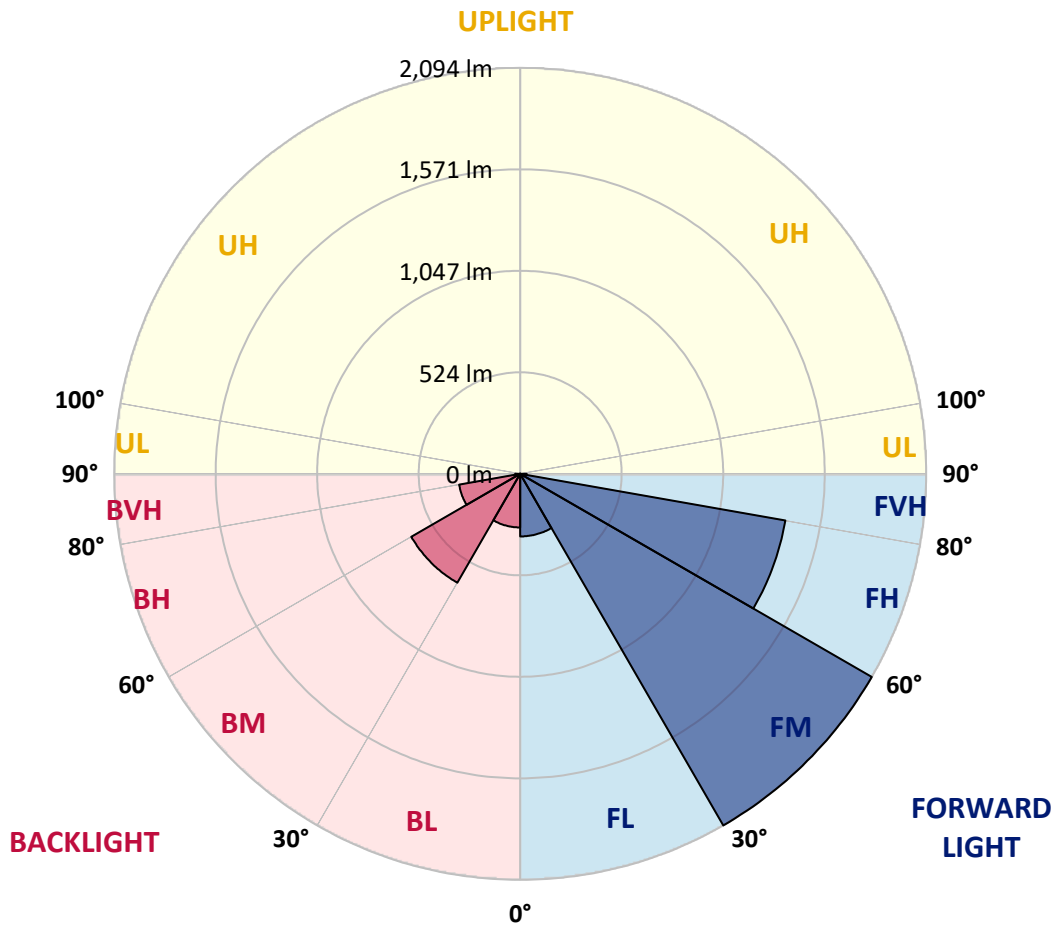
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	323.0	6.3			
FM (30°-60°)	2094.4	41.0			
FH (60°-80°)	1389.3	27.2			G1/1800
FVH (80°-90°)	33.4	0.7			G1/100
BL (0°-30°)	276.8	5.4	B1/500		
BM (30°-60°)	648.6	12.7	B1/1000		
BH (60°-80°)	319.8	6.3	B1/500		G1/500
BVH (80°-90°)	25.5	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	566.9	566.9	566.9	566.9	566.9	566.9	566.9	566.9	566.9	566.9	566.9
2.5°	561.0	564.2	563.4	562.0	561.8	562.3	563.1	563.9	563.7	565.0	567.1
5°	559.4	562.6	562.3	562.3	563.4	565.5	566.9	568.2	566.9	568.5	571.4
7.5°	560.4	562.8	563.9	565.0	567.7	571.7	574.9	577.9	576.3	578.2	581.9
10°	574.1	576.0	577.1	577.1	579.0	583.5	586.7	592.1	590.8	593.7	598.6
12.5°	599.1	601.0	601.0	599.9	601.2	604.2	605.3	611.2	608.8	613.6	618.4
15°	629.7	633.5	630.5	628.6	629.2	632.1	631.9	636.4	634.0	638.0	642.3
17.5°	663.6	668.4	663.6	663.3	662.2	665.4	665.7	669.7	665.4	668.4	671.3
20°	703.6	710.3	706.2	707.6	705.2	706.5	707.9	713.8	707.1	709.2	708.4
22.5°	760.0	768.0	763.7	768.8	767.2	766.1	765.9	776.3	765.9	766.7	758.9
25°	842.1	851.8	844.3	851.3	851.3	854.7	858.8	872.2	854.7	849.6	829.5
27.5°	963.5	973.2	958.4	962.7	961.4	969.9	965.7	999.0	980.2	971.8	931.3
30°	1109.6	1126.8	1098.8	1097.8	1096.4	1110.1	1116.3	1138.3	1119.3	1110.9	1062.1
32.5°	1267.5	1285.5	1252.2	1242.5	1237.4	1245.7	1240.6	1258.4	1245.2	1232.3	1171.9
35°	1434.5	1452.2	1420.6	1401.8	1381.3	1363.9	1345.6	1350.2	1337.8	1318.2	1255.7
37.5°	1592.4	1624.9	1591.3	1571.2	1533.6	1499.5	1448.5	1427.3	1415.7	1397.7	1334.6
40°	1753.3	1771.8	1746.3	1729.1	1688.3	1634.8	1553.2	1508.4	1492.8	1475.3	1421.9
42.5°	1871.7	1889.4	1875.7	1863.9	1831.9	1769.9	1664.4	1608.3	1585.7	1566.1	1520.7
45°	1965.7	1978.8	1970.2	1974.5	1960.8	1900.7	1779.6	1715.4	1692.0	1668.1	1632.4
47.5°	2003.5	2017.5	2031.2	2056.7	2080.1	2035.8	1903.4	1831.4	1806.7	1782.3	1747.1
50°	1999.2	2013.5	2053.2	2107.5	2180.0	2165.2	2033.9	1954.9	1932.1	1904.2	1871.7
52.5°	1964.9	1981.0	2032.0	2122.2	2237.7	2262.1	2166.8	2082.5	2061.0	2027.7	1995.2
55°	1874.6	1884.3	1960.8	2088.7	2251.4	2329.8	2297.0	2218.4	2196.9	2150.4	2115.0
57.5°	1707.3	1721.3	1832.8	1998.2	2217.0	2375.7	2411.4	2361.2	2340.6	2273.7	2236.6
60°	1489.0	1511.3	1638.9	1846.2	2129.5	2375.5	2515.4	2501.7	2484.5	2395.1	2356.4
62.5°	1242.0	1267.8	1390.5	1631.4	1976.4	2308.1	2580.4	2619.3	2610.4	2507.0	2457.6
65°	953.8	971.6	1093.7	1353.4	1738.2	2163.3	2587.9	2699.6	2701.2	2592.2	2510.5
67.5°	635.1	686.1	792.2	1015.6	1419.2	1926.7	2521.8	2712.7	2728.3	2621.4	2483.9
70°	309.9	377.0	480.9	660.1	1015.6	1563.9	2349.1	2604.8	2639.4	2536.0	2325.5
72.5°	128.6	150.4	207.0	325.7	583.0	1055.3	2002.2	2312.1	2376.3	2247.1	1955.2
75°	86.7	94.0	118.4	167.0	265.6	520.4	1443.9	1724.0	1827.4	1697.1	1387.3
77.5°	66.9	71.4	86.2	116.8	157.9	196.8	772.8	1039.0	1092.4	1011.3	721.8
80°	52.6	56.1	64.4	85.1	112.0	105.3	263.4	470.7	501.6	420.8	232.0
82.5°	45.7	47.0	46.2	57.7	74.4	61.5	86.5	173.7	191.7	139.1	75.7
85°	33.0	36.8	38.4	35.7	39.5	31.2	35.4	61.5	67.7	60.4	42.7
87.5°	13.4	19.9	24.4	23.1	14.5	8.9	11.0	18.0	20.7	22.6	14.0
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°	566.9	566.9	566.9	566.9	566.9	566.9	566.9	566.9	566.9	566.9	566.9
2.5°	567.4	569.3	570.6	572.2	573.3	574.9	578.2	580.0	580.3	581.6	581.4
5°	572.5	575.2	578.2	582.5	587.3	591.3	597.5	601.8	603.4	604.7	604.5
7.5°	583.5	587.3	592.7	600.2	607.2	612.5	620.0	625.1	630.3	632.1	632.4
10°	599.9	605.3	613.1	623.3	630.8	637.8	645.6	649.9	655.0	657.1	658.2
12.5°	620.3	626.0	636.2	650.4	657.4	662.2	664.9	663.8	664.9	666.8	667.3
15°	643.7	649.9	661.4	676.7	681.5	677.2	671.3	666.0	665.2	665.7	667.6
17.5°	671.3	675.9	689.3	702.2	698.7	681.0	668.1	659.5	655.2	653.9	655.8
20°	710.0	710.0	721.0	729.1	705.7	675.6	655.5	641.5	632.7	628.9	628.1
22.5°	757.0	752.7	759.7	754.0	704.4	660.6	632.7	608.5	595.1	589.7	588.9
25°	816.6	811.5	809.6	774.7	694.7	636.7	591.3	562.0	550.2	547.3	547.8
27.5°	906.6	893.7	869.2	786.0	677.0	599.1	543.0	515.9	509.1	509.4	510.2
30°	1026.3	1000.6	940.7	787.9	648.0	545.9	493.6	474.2	471.0	472.4	476.9
32.5°	1137.2	1112.8	1013.7	779.3	603.4	493.8	449.3	436.4	431.5	433.1	435.3
35°	1224.3	1217.5	1081.4	767.2	548.6	445.0	409.5	398.5	389.1	387.0	388.6
37.5°	1306.4	1303.7	1132.1	750.3	494.4	410.3	377.6	363.1	349.4	341.8	342.1
40°	1396.7	1394.0	1165.4	724.2	446.3	380.2	348.8	329.8	312.8	299.1	300.5
42.5°	1498.2	1482.3	1181.3	686.9	405.5	354.7	325.5	299.7	277.4	264.8	265.6
45°	1609.1	1573.3	1181.0	639.4	371.1	331.4	300.5	264.0	243.3	231.5	230.9
47.5°	1726.7	1660.4	1166.5	586.7	337.8	305.6	261.8	233.9	220.2	212.9	211.3
50°	1848.1	1741.7	1141.8	526.3	303.7	276.3	237.7	218.6	208.1	201.4	199.0
52.5°	1962.2	1815.6	1112.0	457.9	269.1	247.9	226.9	212.1	201.1	193.6	190.4
55°	2068.3	1879.2	1069.8	387.8	240.9	228.8	221.8	209.5	196.8	188.0	184.5
57.5°	2162.5	1920.6	997.1	322.0	220.7	215.6	216.4	204.9	190.4	182.9	178.0
60°	2240.9	1950.9	889.4	261.0	204.4	202.7	208.1	196.3	179.4	170.8	167.0
62.5°	2287.9	1950.4	757.3	213.8	190.4	190.9	197.1	185.6	168.4	160.3	157.9
65°	2283.9	1902.6	612.3	182.9	177.0	177.5	185.6	173.7	159.2	154.4	154.1
67.5°	2203.1	1786.0	469.7	162.7	162.2	164.6	174.0	165.7	153.6	153.1	153.9
70°	1984.2	1544.1	338.4	146.6	146.9	150.4	162.7	160.6	150.6	151.7	151.5
72.5°	1591.1	1177.3	227.2	129.7	130.0	135.6	152.0	156.6	147.7	161.9	164.1
75°	1059.6	734.2	146.1	111.7	112.0	119.2	142.6	148.8	139.6	161.4	162.7
77.5°	509.1	330.0	105.8	94.0	94.0	100.7	123.3	133.2	119.0	125.4	114.9
80°	175.9	124.1	83.2	75.7	74.1	78.7	103.9	115.5	102.6	94.5	88.6
82.5°	69.3	64.4	66.9	58.8	53.4	56.4	80.8	95.3	75.5	68.2	67.9
85°	39.7	41.9	47.3	38.9	30.9	34.6	59.3	68.5	56.9	50.2	51.3
87.5°	10.7	14.8	21.8	20.1	14.0	14.8	28.2	37.9	32.8	25.2	26.0
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)