

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: P881699

Luminaire Tested: **NAV-SB1B-722-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881699
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-722-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2200K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4494 lumens
Efficiency: N/A
Efficacy: 112.9 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

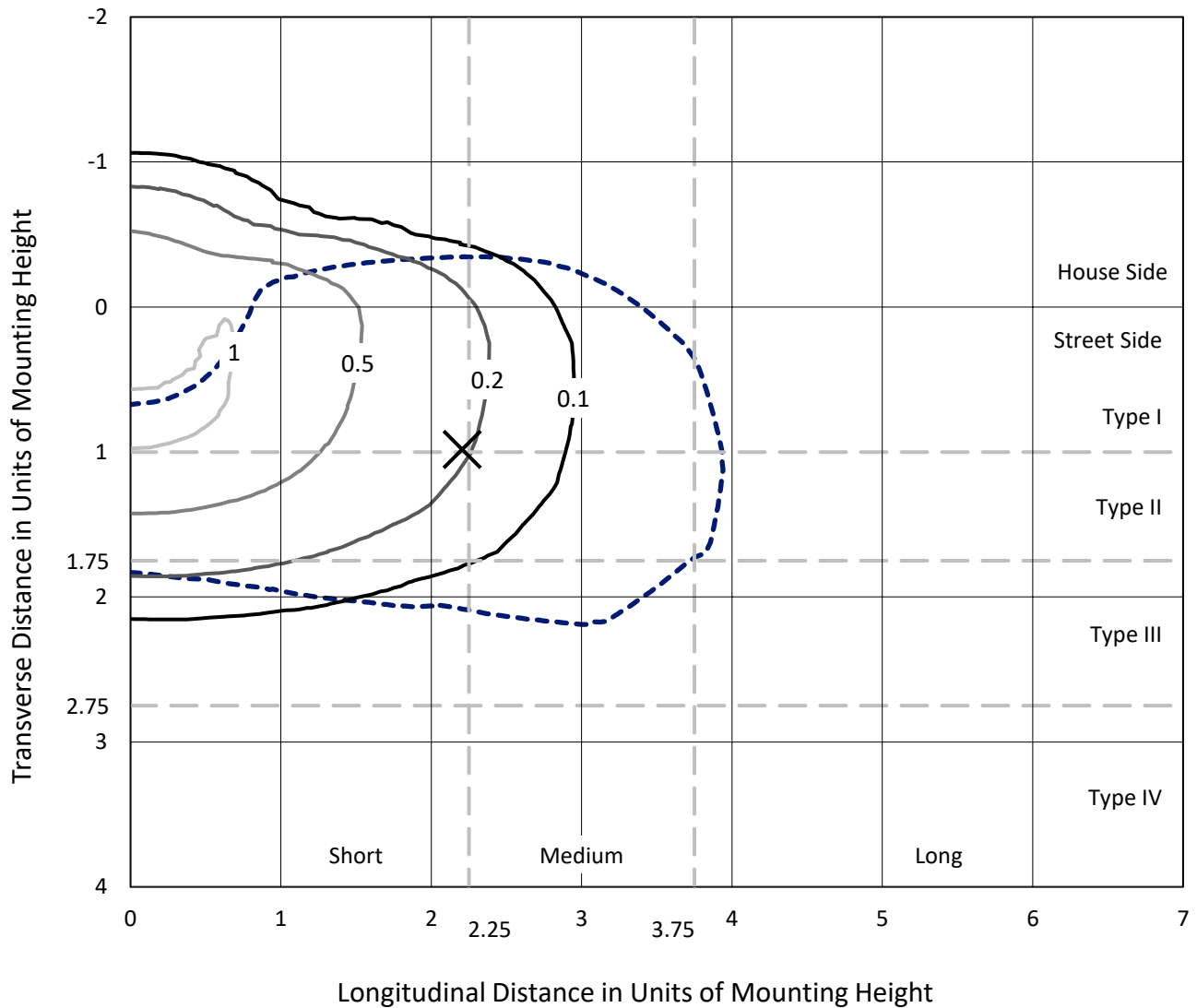
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

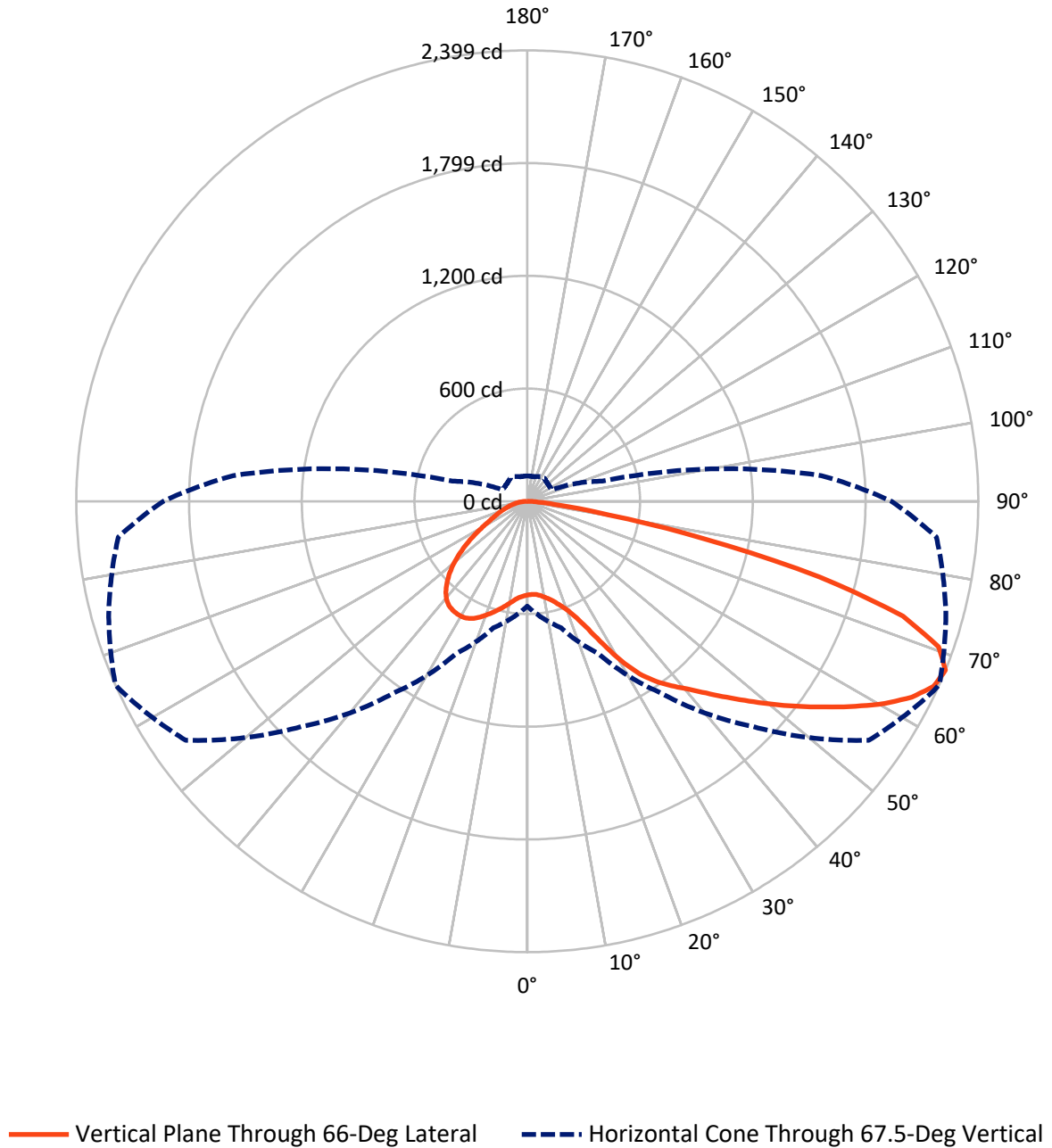
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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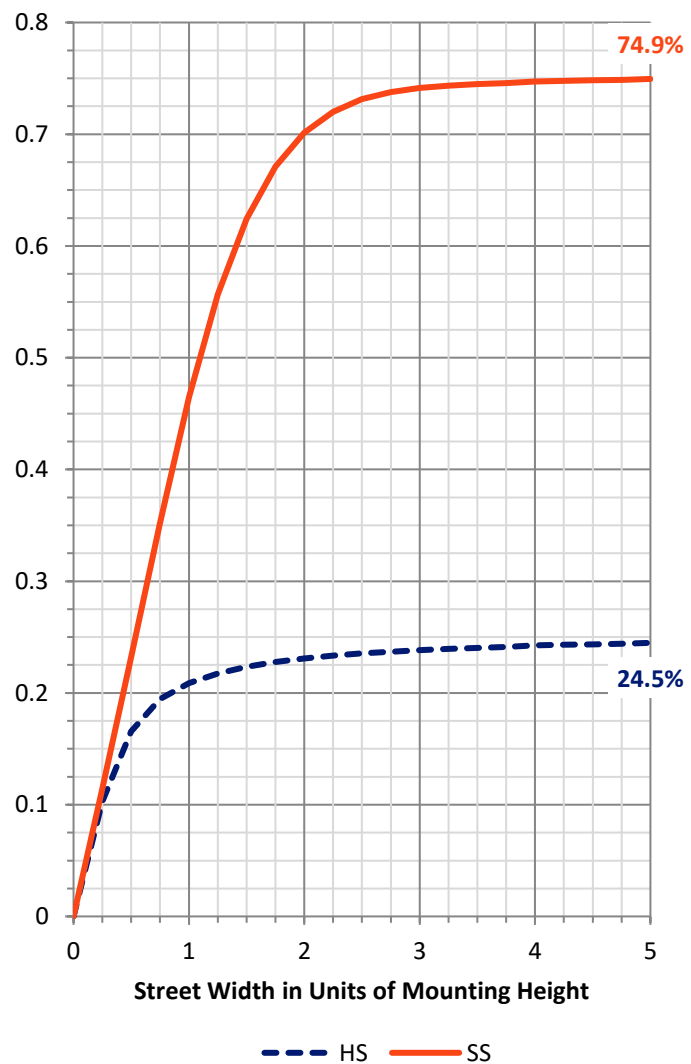
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1117.4	0.0	1117.4
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	3376.6	0.0	3376.6
	% Fixture	75.1	0.0	75.1
Total	Lumens	4494.0	0.0	4494.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.4	1.1
10°-20°	163.3	3.6
20°-30°	314.7	7.0
30°-40°	551.8	12.3
40°-50°	820.3	18.3
50°-60°	1039.8	23.1
60°-70°	1017.5	22.6
70°-80°	485.3	10.8
80°-90°	51.9	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°	4494.0	100.0
0°-180°	4494.0	100.0

Coefficient of Utilization



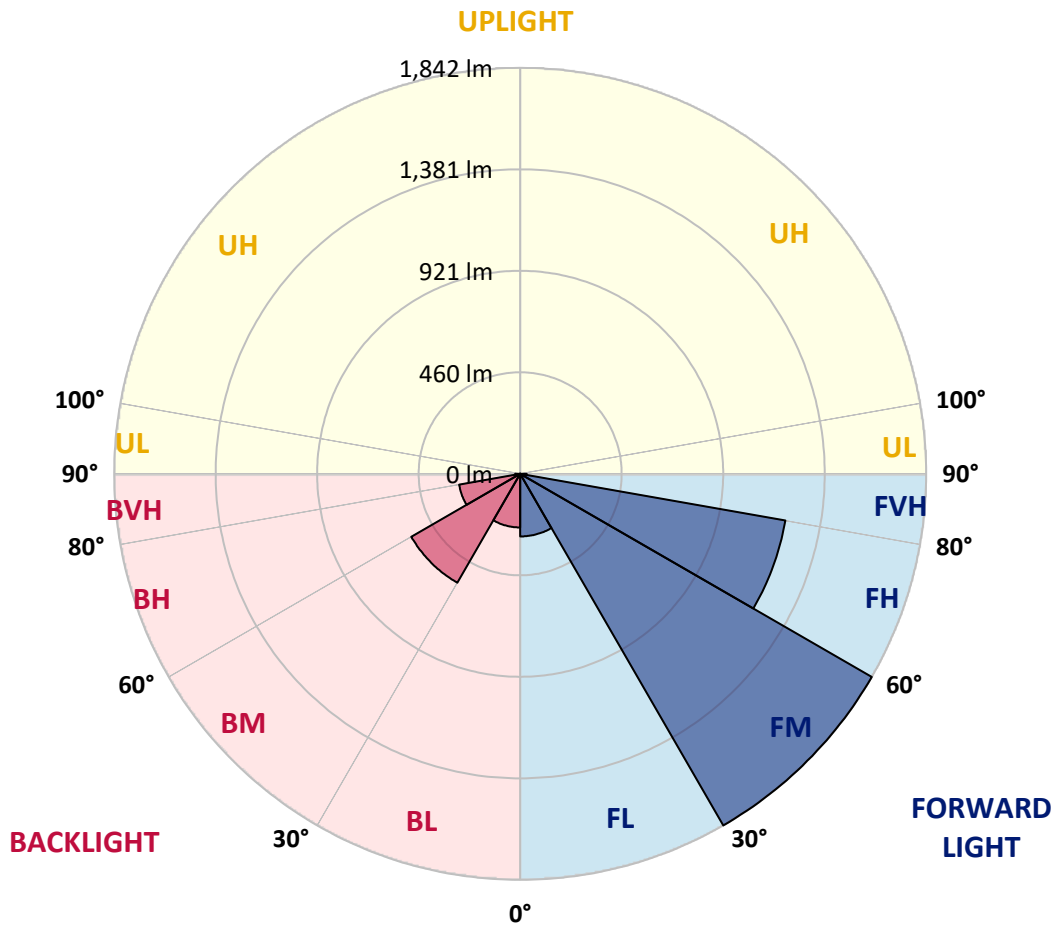
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	284.0	6.3			
FM (30°-60°)	1841.6	41.0			
FH (60°-80°)	1221.6	27.2			G1/1800
FVH (80°-90°)	29.4	0.7			G1/100
BL (0°-30°)	243.4	5.4	B1/500		
BM (30°-60°)	570.3	12.7	B1/1000		
BH (60°-80°)	281.2	6.3	B1/500		G1/500
BVH (80°-90°)	22.5	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°	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4
2.5°	493.2	496.1	495.4	494.2	494.0	494.4	495.1	495.8	495.6	496.8	498.7
5°	491.8	494.7	494.4	494.4	495.4	497.3	498.4	499.6	498.4	499.9	502.5
7.5°	492.8	494.9	495.8	496.8	499.2	502.7	505.5	508.1	506.7	508.4	511.7
10°	504.8	506.5	507.4	507.4	509.1	513.1	515.9	520.6	519.5	522.1	526.3
12.5°	526.8	528.4	528.4	527.5	528.7	531.3	532.2	537.4	535.3	539.5	543.8
15°	553.7	557.0	554.4	552.8	553.2	555.8	555.6	559.6	557.5	561.0	564.8
17.5°	583.4	587.7	583.4	583.2	582.3	585.1	585.3	588.9	585.1	587.7	590.3
20°	618.6	624.5	621.0	622.2	620.0	621.2	622.4	627.6	621.7	623.6	622.9
22.5°	668.2	675.3	671.5	676.0	674.6	673.6	673.4	682.6	673.4	674.1	667.3
25°	740.5	749.0	742.4	748.5	748.5	751.6	755.1	766.9	751.6	747.1	729.4
27.5°	847.2	855.7	842.7	846.5	845.3	852.9	849.1	878.4	861.8	854.5	818.9
30°	975.6	990.7	966.2	965.2	964.1	976.1	981.5	1000.9	984.1	976.8	933.8
32.5°	1114.5	1130.3	1101.0	1092.5	1088.0	1095.3	1090.9	1106.4	1094.9	1083.5	1030.4
35°	1261.3	1276.9	1249.1	1232.5	1214.6	1199.2	1183.2	1187.2	1176.3	1159.1	1104.1
37.5°	1400.2	1428.7	1399.2	1381.5	1348.5	1318.5	1273.6	1255.0	1244.8	1229.0	1173.5
40°	1541.6	1557.9	1535.5	1520.4	1484.5	1437.5	1365.7	1326.3	1312.6	1297.2	1250.2
42.5°	1645.7	1661.3	1649.3	1638.9	1610.8	1556.3	1463.5	1414.1	1394.3	1377.0	1337.1
45°	1728.4	1739.9	1732.4	1736.2	1724.1	1671.2	1564.8	1508.3	1487.8	1466.8	1435.4
47.5°	1761.7	1774.0	1786.0	1808.4	1829.0	1790.0	1673.6	1610.3	1588.6	1567.1	1536.2
50°	1757.9	1770.4	1805.4	1853.0	1916.8	1903.8	1788.4	1718.9	1698.9	1674.3	1645.7
52.5°	1727.7	1741.8	1786.7	1866.0	1967.6	1989.1	1905.2	1831.1	1812.2	1782.9	1754.4
55°	1648.3	1656.8	1724.1	1836.5	1979.6	2048.6	2019.7	1950.6	1931.7	1890.8	1859.7
57.5°	1501.2	1513.5	1611.5	1757.0	1949.4	2088.9	2120.3	2076.2	2058.0	1999.2	1966.6
60°	1309.3	1328.9	1441.0	1623.3	1872.4	2088.7	2211.7	2199.7	2184.6	2105.9	2071.9
62.5°	1092.0	1114.7	1222.6	1434.4	1737.8	2029.4	2268.9	2303.1	2295.3	2204.4	2160.9
65°	838.7	854.3	961.7	1190.0	1528.4	1902.2	2275.5	2373.7	2375.1	2279.2	2207.5
67.5°	558.4	603.3	696.5	893.0	1247.9	1694.1	2217.4	2385.3	2399.0	2305.0	2184.1
70°	272.5	331.5	422.9	580.4	893.0	1375.1	2065.6	2290.3	2320.8	2229.9	2044.8
72.5°	113.1	132.2	182.0	286.4	512.6	927.9	1760.5	2033.0	2089.4	1975.8	1719.2
75°	76.3	82.6	104.1	146.9	233.5	457.6	1269.6	1515.9	1606.8	1492.3	1219.8
77.5°	58.8	62.8	75.8	102.7	138.8	173.1	679.5	913.5	960.5	889.2	634.7
80°	46.3	49.3	56.7	74.8	98.5	92.6	231.6	413.9	441.1	370.0	204.0
82.5°	40.1	41.3	40.6	50.8	65.4	54.1	76.0	152.8	168.6	122.3	66.6
85°	29.0	32.3	33.8	31.4	34.7	27.4	31.2	54.1	59.5	53.1	37.5
87.5°	11.8	17.5	21.5	20.3	12.8	7.8	9.7	15.8	18.2	19.8	12.3
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°	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4
2.5°	498.9	500.6	501.7	503.2	504.1	505.5	508.4	510.0	510.2	511.4	511.2
5°	503.4	505.8	508.4	512.1	516.4	519.9	525.4	529.1	530.6	531.7	531.5
7.5°	513.1	516.4	521.1	527.7	533.9	538.6	545.2	549.7	554.2	555.8	556.1
10°	527.5	532.2	539.1	548.0	554.6	560.8	567.6	571.4	575.9	577.8	578.7
12.5°	545.4	550.4	559.4	571.9	578.0	582.3	584.6	583.7	584.6	586.3	586.8
15°	566.0	571.4	581.6	595.0	599.3	595.5	590.3	585.6	584.9	585.3	587.0
17.5°	590.3	594.3	606.1	617.4	614.4	598.8	587.5	579.9	576.1	574.9	576.6
20°	624.3	624.3	634.0	641.1	620.5	594.1	576.4	564.1	556.3	553.0	552.3
22.5°	665.6	661.8	668.0	663.0	619.3	580.8	556.3	535.0	523.2	518.5	517.8
25°	718.0	713.5	711.9	681.2	610.8	559.8	519.9	494.2	483.8	481.2	481.7
27.5°	797.1	785.8	764.3	691.1	595.3	526.8	477.4	453.6	447.7	447.9	448.6
30°	902.4	879.8	827.1	692.8	569.8	480.0	434.0	417.0	414.2	415.3	419.3
32.5°	1000.0	978.5	891.3	685.2	530.6	434.2	395.0	383.7	379.4	380.9	382.7
35°	1076.5	1070.6	950.8	674.6	482.4	391.2	360.1	350.4	342.1	340.2	341.7
37.5°	1148.7	1146.4	995.5	659.7	434.7	360.8	332.0	319.2	307.2	300.6	300.8
40°	1228.0	1225.7	1024.7	636.8	392.4	334.3	306.7	290.0	275.1	263.0	264.2
42.5°	1317.3	1303.4	1038.7	604.0	356.5	311.9	286.2	263.5	243.9	232.8	233.5
45°	1414.8	1383.4	1038.4	562.2	326.3	291.4	264.2	232.1	213.9	203.5	203.1
47.5°	1518.2	1459.9	1025.7	515.9	297.0	268.7	230.2	205.7	193.6	187.2	185.8
50°	1625.0	1531.5	1004.0	462.8	267.0	243.0	209.0	192.2	183.0	177.1	175.0
52.5°	1725.3	1596.4	977.8	402.6	236.6	217.9	199.5	186.5	176.9	170.2	167.4
55°	1818.6	1652.4	940.7	341.0	211.8	201.2	195.0	184.2	173.1	165.3	162.2
57.5°	1901.5	1688.7	876.7	283.1	194.1	189.6	190.3	180.2	167.4	160.8	156.5
60°	1970.4	1715.4	782.0	229.5	179.7	178.3	183.0	172.6	157.7	150.2	146.9
62.5°	2011.7	1714.9	665.9	187.9	167.4	167.9	173.3	163.2	148.0	141.0	138.8
65°	2008.2	1672.9	538.3	160.8	155.6	156.1	163.2	152.8	140.0	135.8	135.5
67.5°	1937.1	1570.4	413.0	143.1	142.6	144.7	153.0	145.7	135.1	134.6	135.3
70°	1744.7	1357.7	297.5	128.9	129.2	132.2	143.1	141.2	132.5	133.4	133.2
72.5°	1399.0	1035.1	199.8	114.0	114.3	119.2	133.6	137.7	129.9	142.4	144.3
75°	931.7	645.5	128.4	98.2	98.5	104.8	125.4	130.8	122.8	141.9	143.1
77.5°	447.7	290.2	93.0	82.6	82.6	88.5	108.4	117.1	104.6	110.3	101.1
80°	154.7	109.1	73.2	66.6	65.2	69.2	91.4	101.5	90.2	83.1	77.9
82.5°	60.9	56.7	58.8	51.7	47.0	49.6	71.1	83.8	66.3	60.0	59.7
85°	34.9	36.8	41.6	34.2	27.2	30.5	52.2	60.2	50.1	44.2	45.1
87.5°	9.4	13.0	19.1	17.7	12.3	13.0	24.8	33.3	28.8	22.2	22.9
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)