

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: P881569

Luminaire Tested: **NAV-SB1A-740-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881569
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-SB1A-740-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4844 lumens
Efficiency: N/A
Efficacy: 156.8 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

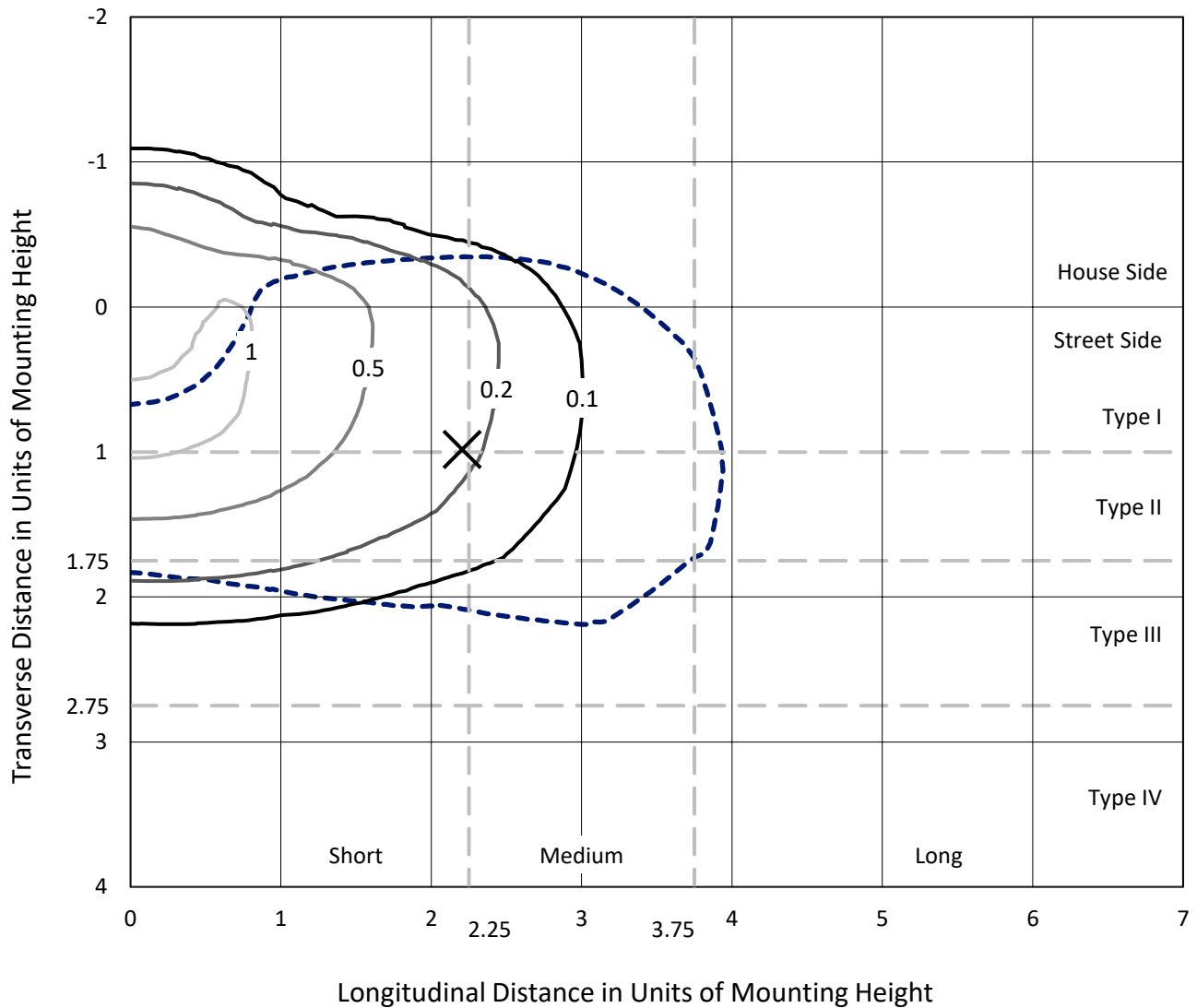
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881569
 CATALOG NUMBER: NAV-SB1A-740-U-T3

Iso-Footcandle Lines of Horizontal Illumination

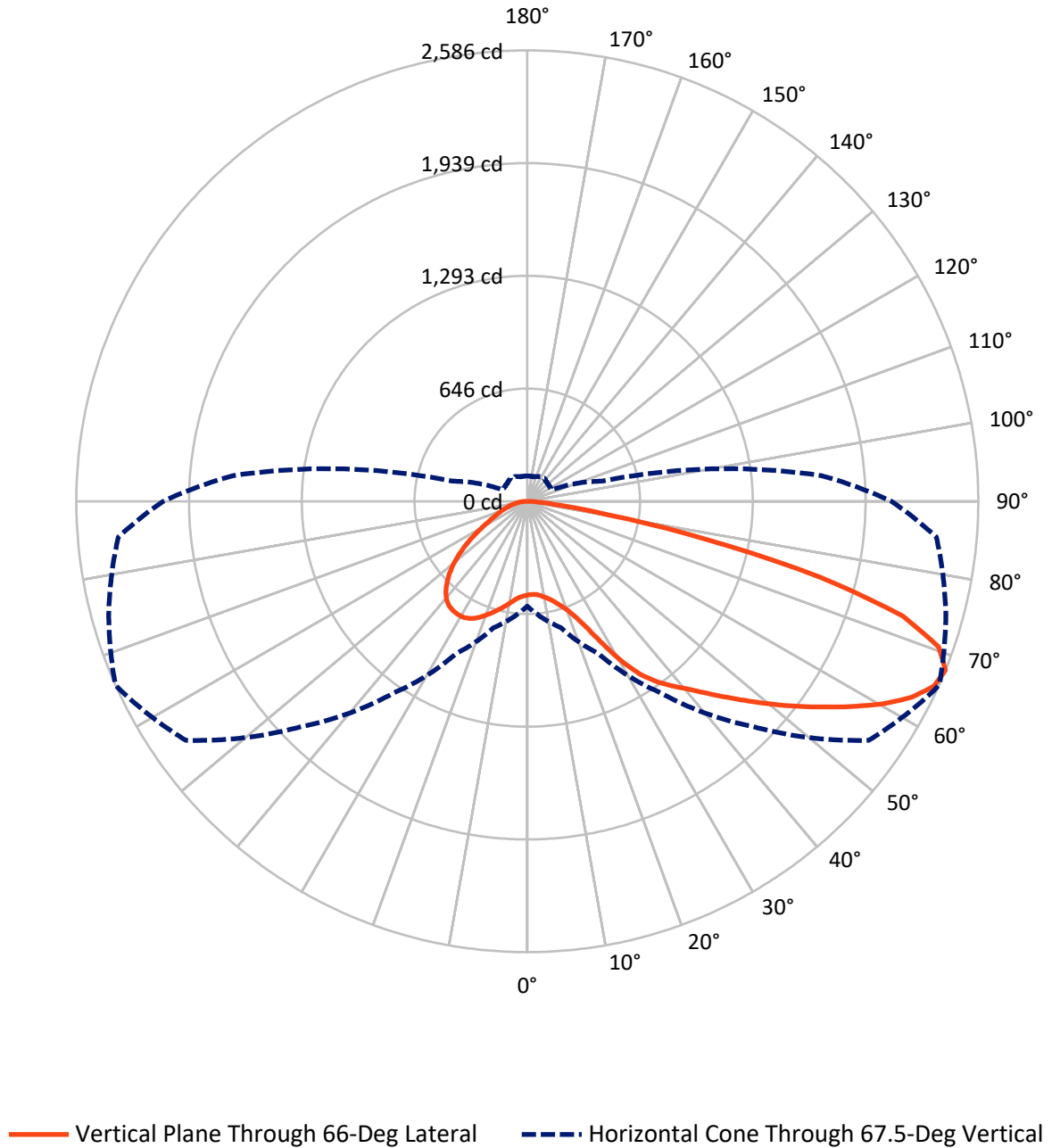
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type III - Short - N/A

REPORT NUMBER: P881569
CATALOG NUMBER: NAV-SB1A-740-U-T3

Luminous Intensity Polar Plot



REPORT NUMBER: P881569
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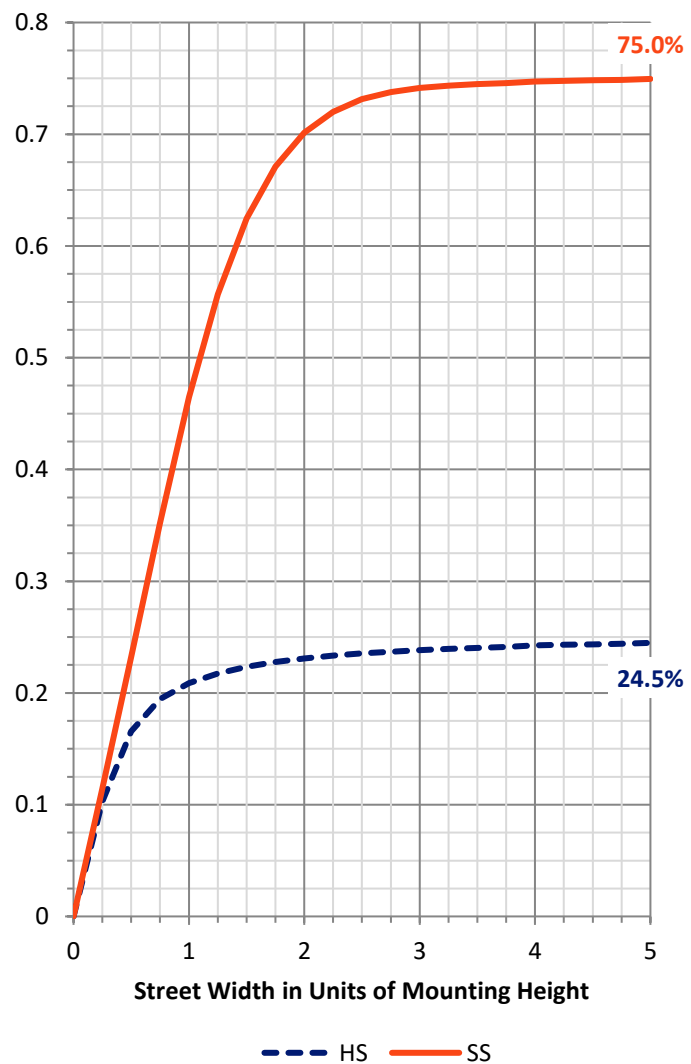
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1204.4	0.0	1204.4
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	3639.6	0.0	3639.6
	% Fixture	75.1	0.0	75.1
Total	Lumens	4844.0	0.0	4844.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.3	1.1
10°-20°	176.0	3.6
20°-30°	339.2	7.0
30°-40°	594.8	12.3
40°-50°	884.2	18.3
50°-60°	1120.8	23.1
60°-70°	1096.7	22.6
70°-80°	523.1	10.8
80°-90°	55.9	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°	4844.0	100.0
0°-180°	4844.0	100.0

Coefficient of Utilization



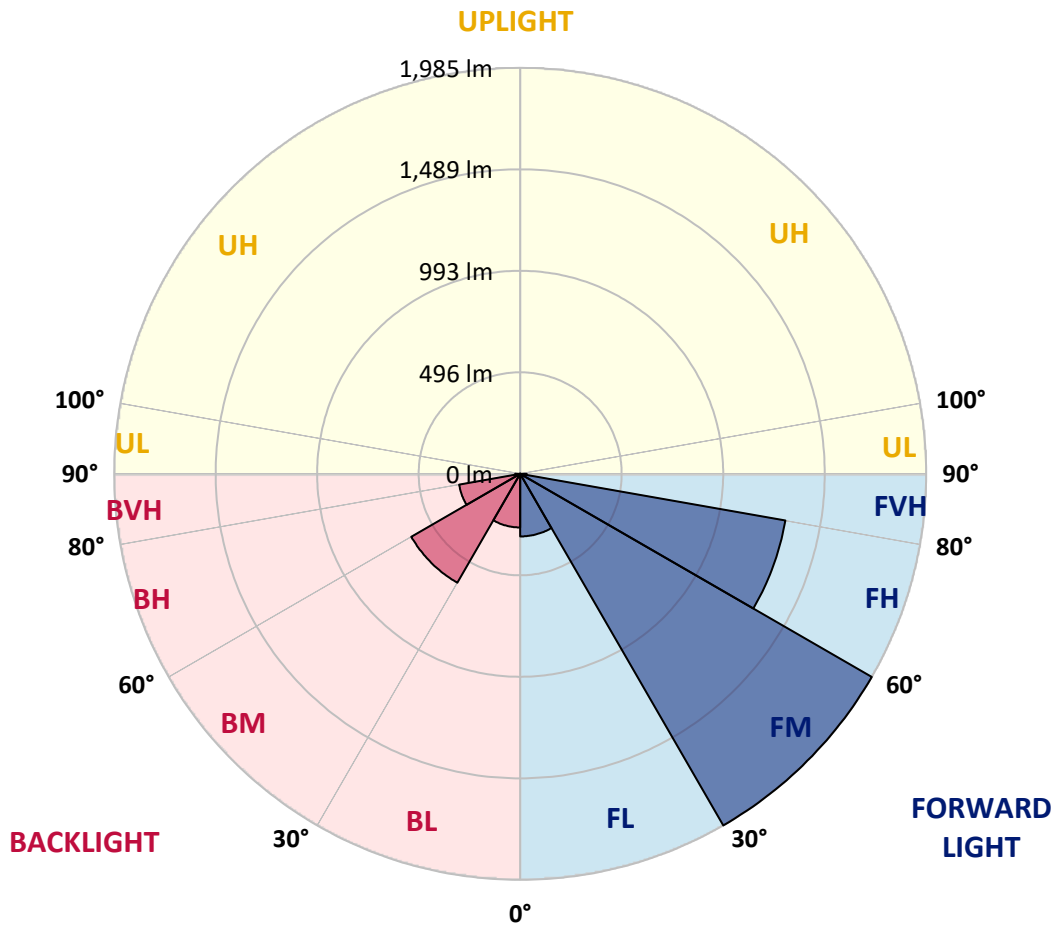
REPORT NUMBER: P881569
 CATALOG NUMBER: NAV-SB1A-740-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	306.1	6.3			
FM (30°-60°)	1985.0	41.0			
FH (60°-80°)	1316.7	27.2			G1/1800
FVH (80°-90°)	31.7	0.7			G1/100
BL (0°-30°)	262.4	5.4	B1/500		
BM (30°-60°)	614.8	12.7	B1/1000		
BH (60°-80°)	303.1	6.3	B1/500		G1/500
BVH (80°-90°)	24.2	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



REPORT NUMBER: P881569
 CATALOG NUMBER: NAV-SB1A-740-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	537.3	537.3	537.3	537.3	537.3	537.3	537.3	537.3	537.3	537.3	537.3
2.5°	531.7	534.7	534.0	532.7	532.4	532.9	533.7	534.5	534.2	535.5	537.5
5°	530.1	533.2	532.9	532.9	534.0	536.0	537.3	538.5	537.3	538.8	541.6
7.5°	531.2	533.4	534.5	535.5	538.0	541.8	544.9	547.7	546.2	548.0	551.5
10°	544.1	545.9	546.9	546.9	548.7	553.0	556.1	561.2	559.9	562.7	567.3
12.5°	567.8	569.6	569.6	568.6	569.8	572.6	573.7	579.3	577.0	581.5	586.1
15°	596.8	600.4	597.6	595.8	596.3	599.1	598.9	603.2	600.9	604.7	608.8
17.5°	628.9	633.5	628.9	628.6	627.6	630.7	630.9	634.7	630.7	633.5	636.3
20°	666.8	673.2	669.4	670.6	668.3	669.6	670.9	676.5	670.1	672.2	671.4
22.5°	720.3	727.9	723.8	728.7	727.1	726.1	725.9	735.8	725.9	726.6	719.2
25°	798.1	807.3	800.2	806.8	806.8	810.1	813.9	826.6	810.1	805.3	786.2
27.5°	913.2	922.3	908.3	912.4	911.1	919.3	915.2	946.8	928.9	921.1	882.6
30°	1051.6	1067.9	1041.4	1040.4	1039.2	1052.1	1058.0	1078.9	1060.8	1052.9	1006.6
32.5°	1201.3	1218.3	1186.8	1177.6	1172.8	1180.7	1175.8	1192.6	1180.1	1167.9	1110.7
35°	1359.6	1376.4	1346.3	1328.5	1309.2	1292.6	1275.3	1279.7	1268.0	1249.4	1190.1
37.5°	1509.2	1540.0	1508.2	1489.1	1453.5	1421.2	1372.8	1352.7	1341.8	1324.7	1264.9
40°	1661.7	1679.2	1655.1	1638.8	1600.1	1549.4	1472.1	1429.6	1414.8	1398.3	1347.6
42.5°	1773.9	1790.7	1777.7	1766.5	1736.2	1677.5	1577.4	1524.2	1502.9	1484.3	1441.3
45°	1863.0	1875.5	1867.3	1871.4	1858.4	1801.4	1686.6	1625.8	1603.6	1581.0	1547.1
47.5°	1898.9	1912.1	1925.1	1949.3	1971.4	1929.4	1803.9	1735.7	1712.3	1689.2	1655.8
50°	1894.8	1908.3	1946.0	1997.4	2066.1	2052.1	1927.6	1852.8	1831.2	1804.7	1773.9
52.5°	1862.2	1877.5	1925.9	2011.4	2120.8	2144.0	2053.6	1973.7	1953.3	1921.8	1891.0
55°	1776.7	1785.9	1858.4	1979.6	2133.8	2208.1	2177.1	2102.5	2082.1	2038.1	2004.5
57.5°	1618.2	1631.4	1737.0	1893.8	2101.2	2251.6	2285.5	2237.9	2218.3	2154.9	2119.8
60°	1411.2	1432.4	1553.3	1749.7	2018.2	2251.4	2384.0	2371.0	2354.7	2269.9	2233.3
62.5°	1177.1	1201.5	1317.8	1546.1	1873.2	2187.5	2445.6	2482.5	2474.1	2376.1	2329.2
65°	904.0	920.8	1036.6	1282.7	1647.4	2050.3	2452.7	2558.6	2560.1	2456.8	2379.4
67.5°	601.9	650.3	750.8	962.5	1345.1	1826.1	2390.1	2571.0	2585.8	2484.5	2354.2
70°	293.7	357.3	455.8	625.6	962.5	1482.2	2226.4	2468.7	2501.5	2403.6	2204.0
72.5°	121.9	142.5	196.2	308.7	552.5	1000.2	1897.6	2191.3	2252.1	2129.7	1853.1
75°	82.2	89.1	112.2	158.3	251.7	493.2	1368.5	1633.9	1731.9	1608.5	1314.8
77.5°	63.4	67.7	81.7	110.7	149.6	186.6	732.5	984.7	1035.3	958.5	684.1
80°	49.9	53.2	61.1	80.7	106.1	99.8	249.7	446.2	475.4	398.8	219.9
82.5°	43.3	44.5	43.8	54.7	70.5	58.3	82.0	164.7	181.7	131.8	71.8
85°	31.3	34.9	36.4	33.8	37.4	29.5	33.6	58.3	64.1	57.3	40.5
87.5°	12.7	18.8	23.2	21.9	13.7	8.4	10.4	17.1	19.6	21.4	13.2
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: P881569
 CATALOG NUMBER: NAV-SB1A-740-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	537.3	537.3	537.3	537.3	537.3	537.3	537.3	537.3	537.3	537.3	537.3
2.5°	537.8	539.6	540.8	542.4	543.4	544.9	548.0	549.7	550.0	551.3	551.0
5°	542.6	545.2	548.0	552.0	556.6	560.4	566.3	570.3	571.9	573.1	572.9
7.5°	553.0	556.6	561.7	568.8	575.4	580.5	587.7	592.5	597.3	599.1	599.4
10°	568.6	573.7	581.0	590.7	597.8	604.5	611.8	615.9	620.7	622.8	623.8
12.5°	587.9	593.3	602.9	616.4	623.0	627.6	630.2	629.1	630.2	631.9	632.4
15°	610.1	615.9	626.8	641.4	645.9	641.9	636.3	631.2	630.4	630.9	632.7
17.5°	636.3	640.6	653.3	665.5	662.2	645.4	633.2	625.1	621.0	619.7	621.5
20°	672.9	672.9	683.4	691.0	668.8	640.3	621.3	608.0	599.6	596.1	595.3
22.5°	717.5	713.4	720.0	714.7	667.6	626.1	599.6	576.7	564.0	558.9	558.1
25°	774.0	769.1	767.3	734.3	658.4	603.4	560.4	532.7	521.5	518.7	519.2
27.5°	859.2	847.0	823.8	744.9	641.6	567.8	514.6	488.9	482.5	482.8	483.6
30°	972.7	948.3	891.5	746.7	614.1	517.4	467.8	449.5	446.4	447.7	452.0
32.5°	1077.8	1054.7	960.8	738.6	571.9	468.0	425.8	413.6	409.0	410.5	412.6
35°	1160.3	1153.9	1024.9	727.1	520.0	421.7	388.1	377.7	368.8	366.7	368.3
37.5°	1238.2	1235.6	1073.0	711.1	468.5	388.9	357.8	344.1	331.1	324.0	324.2
40°	1323.7	1321.1	1104.6	686.4	423.0	360.4	330.6	312.5	296.5	283.5	284.8
42.5°	1419.9	1404.9	1119.6	651.0	384.3	336.2	308.5	284.0	262.9	250.9	251.7
45°	1525.0	1491.2	1119.3	606.0	351.7	314.1	284.8	250.2	230.6	219.4	218.9
47.5°	1636.5	1573.6	1105.6	556.1	320.2	289.6	248.1	221.7	208.7	201.8	200.3
50°	1751.5	1650.7	1082.2	498.8	287.8	261.9	225.2	207.2	197.2	190.9	188.6
52.5°	1859.7	1720.7	1053.9	433.9	255.0	234.9	215.1	201.1	190.6	183.5	180.4
55°	1960.2	1781.0	1014.0	367.5	228.3	216.8	210.2	198.5	186.6	178.2	174.8
57.5°	2049.5	1820.2	945.0	305.2	209.2	204.4	205.1	194.2	180.4	173.3	168.7
60°	2123.9	1849.0	842.9	247.4	193.7	192.2	197.2	186.0	170.0	161.9	158.3
62.5°	2168.4	1848.5	717.7	202.6	180.4	181.0	186.8	175.9	159.6	151.9	149.6
65°	2164.6	1803.2	580.3	173.3	167.7	168.2	175.9	164.7	150.9	146.3	146.1
67.5°	2088.0	1692.7	445.1	154.2	153.7	156.0	164.9	157.0	145.6	145.1	145.8
70°	1880.5	1463.4	320.7	139.0	139.2	142.5	154.2	152.2	142.8	143.8	143.5
72.5°	1508.0	1115.8	215.3	122.9	123.2	128.5	144.1	148.4	140.0	153.5	155.5
75°	1004.3	695.8	138.5	105.9	106.1	113.0	135.1	141.0	132.3	153.0	154.2
77.5°	482.5	312.8	100.3	89.1	89.1	95.4	116.8	126.2	112.7	118.9	108.9
80°	166.7	117.6	78.9	71.8	70.2	74.6	98.5	109.4	97.2	89.6	84.0
82.5°	65.7	61.1	63.4	55.7	50.6	53.4	76.6	90.3	71.5	64.6	64.4
85°	37.7	39.7	44.8	36.9	29.3	32.8	56.2	64.9	54.0	47.6	48.6
87.5°	10.2	14.0	20.6	19.1	13.2	14.0	26.7	35.9	31.0	23.9	24.7
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)