

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: P959239

Luminaire Tested: **NAV-SB1A-727-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959239
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-727-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4323.4 lumens
Efficiency: N/A
Efficacy: 139.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

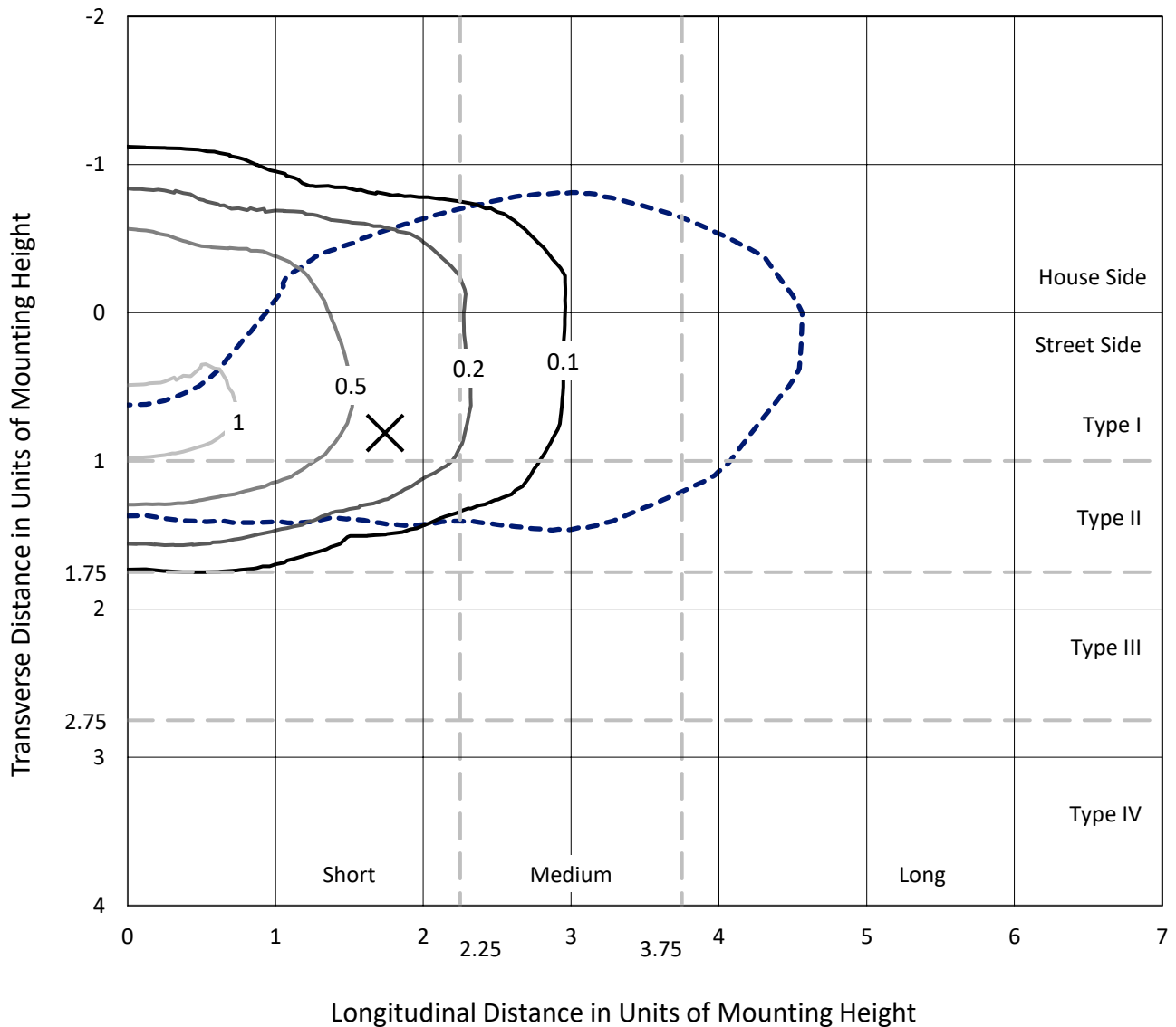
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P959239
 CATALOG NUMBER: NAV-SB1A-727-U-T2U

Iso-Footcandle Lines of Horizontal Illumination

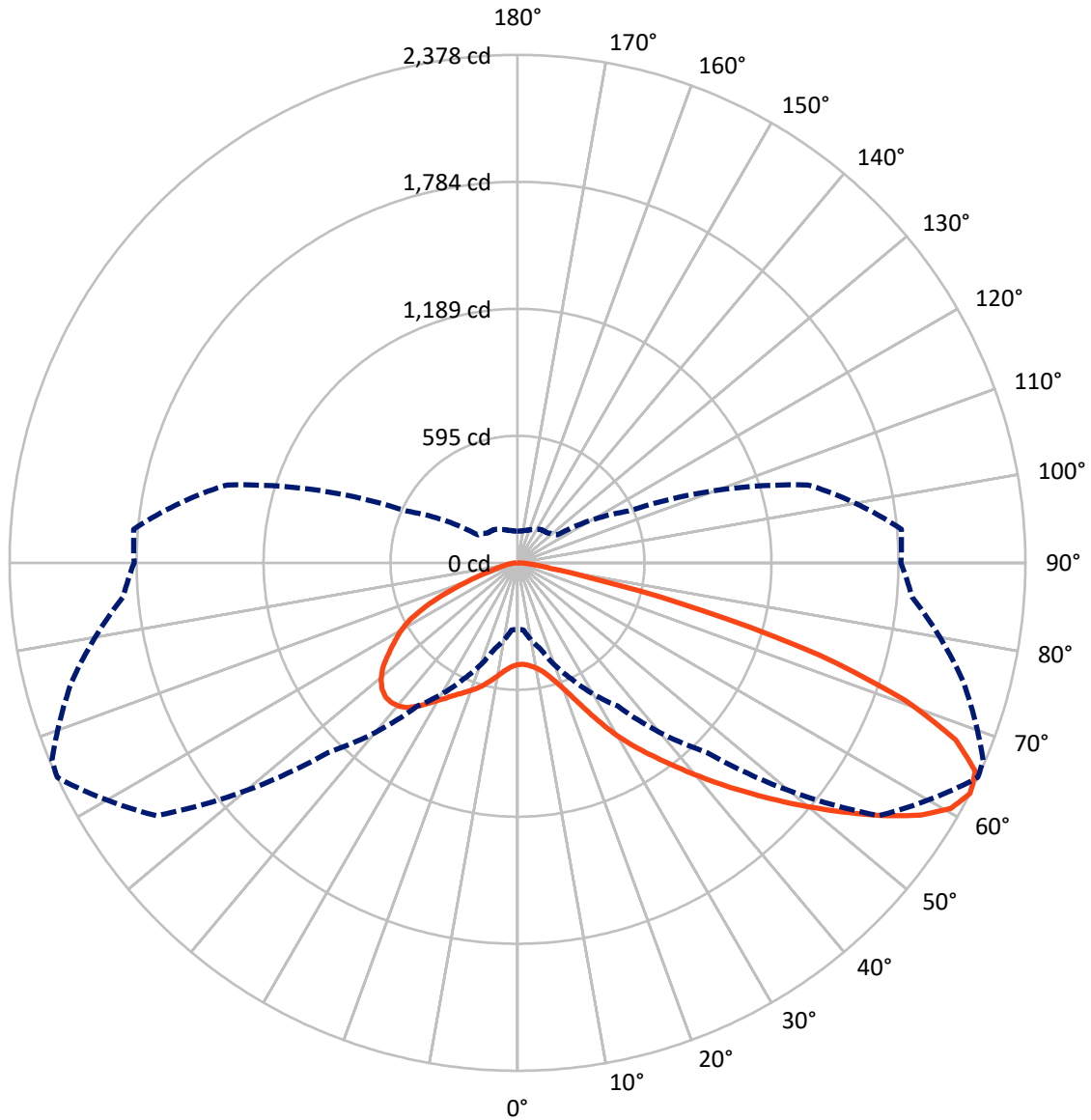
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P959239
CATALOG NUMBER: NAV-SB1A-727-U-T2U

Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P959239
 CATALOG NUMBER: NAV-SB1A-727-U-T2U

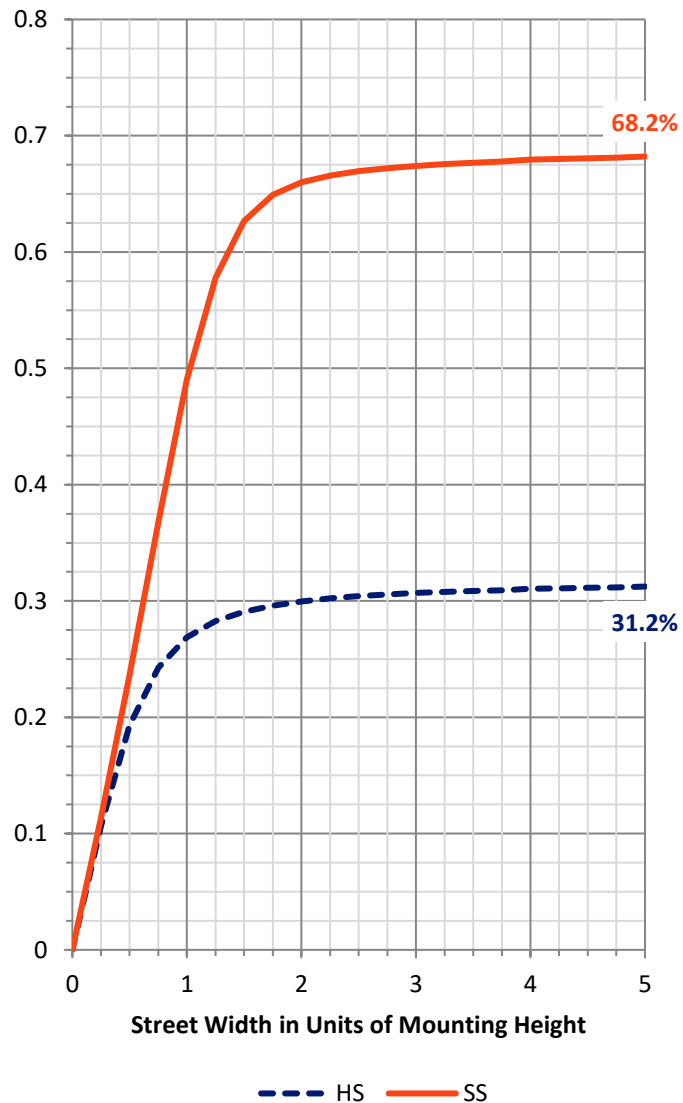
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1364.3	0.0	1364.3
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	2959.2	0.0	2959.2
	% Fixture	68.4	0.0	68.4
Total	Lumens	4323.4	0.0	4323.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.5	1.1
10°-20°	161.1	3.7
20°-30°	326.6	7.6
30°-40°	565.2	13.1
40°-50°	855.3	19.8
50°-60°	1002.7	23.2
60°-70°	840.7	19.4
70°-80°	464.1	10.7
80°-90°	60.3	1.4
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°	4323.4	100.0
0°-180°	4323.4	100.0

Coefficient of Utilization

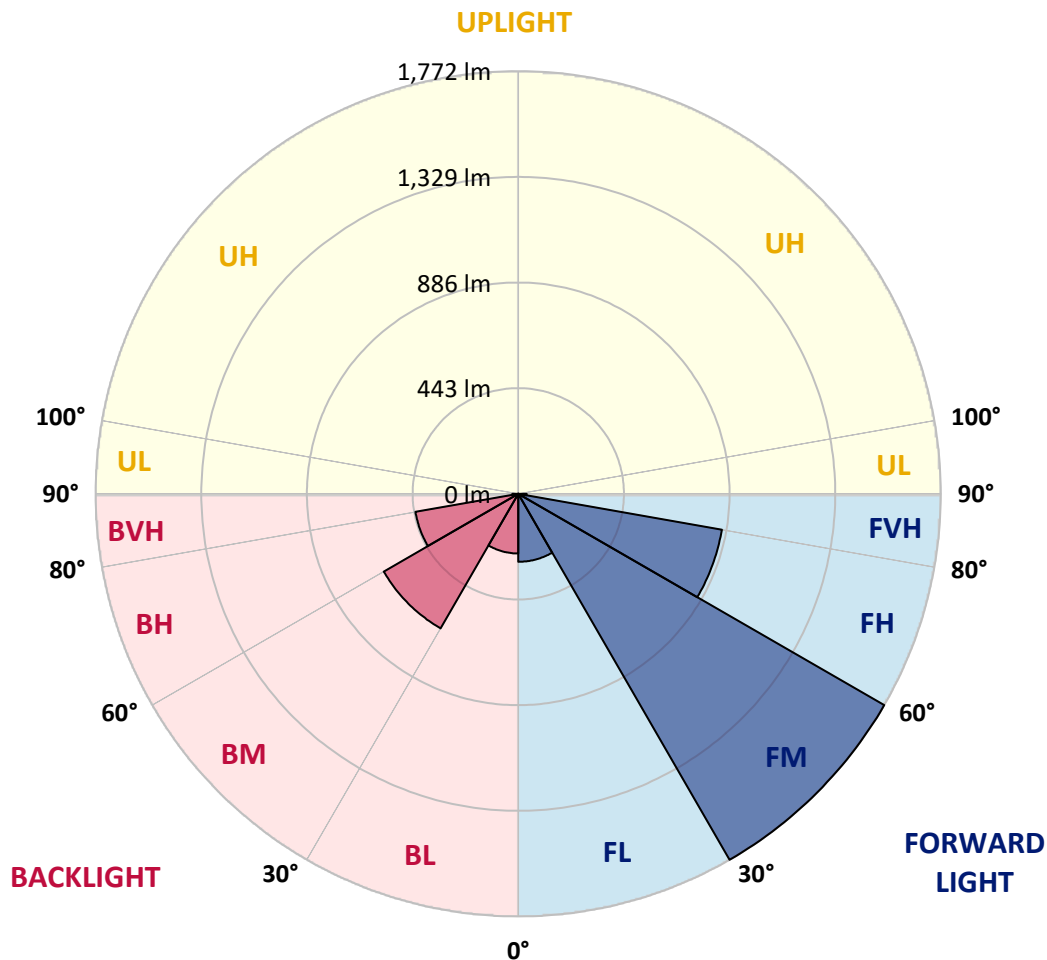


REPORT NUMBER: P959239
 CATALOG NUMBER: NAV-SB1A-727-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	285.0	6.6			
FM (30°-60°)	1771.9	41.0			
FH (60°-80°)	867.2	20.1			G1/1800
FVH (80°-90°)	35.1	0.8			G1/100
BL (0°-30°)	250.2	5.8	B1/500		
BM (30°-60°)	651.3	15.1	B1/1000		
BH (60°-80°)	437.6	10.1	B1/500		G1/500
BVH (80°-90°)	25.1	0.6			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 II Short



REPORT NUMBER: P959239

CATALOG NUMBER: NAV-SB1A-727-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4
2.5°	473.2	471.9	473.0	473.0	473.6	473.2	474.9	475.3	476.0	477.3	477.3
5°	468.5	468.3	470.4	472.1	474.0	475.5	477.5	480.4	480.9	482.5	484.5
7.5°	467.0	465.7	468.8	471.1	475.3	479.1	484.5	489.4	491.5	492.1	495.9
10°	479.1	476.8	479.8	481.1	484.7	488.5	494.8	502.7	504.9	507.6	511.9
12.5°	499.8	497.3	501.5	503.6	507.0	510.2	514.6	522.1	523.3	528.3	532.3
15°	528.0	525.1	527.8	530.2	535.9	539.0	543.2	550.6	550.6	554.5	557.4
17.5°	566.4	562.5	564.6	565.5	569.1	573.8	581.0	587.4	590.8	589.5	585.5
20°	623.6	618.9	618.9	614.4	613.1	616.8	626.3	635.2	638.8	631.9	622.0
22.5°	709.5	702.7	698.9	683.7	677.6	678.0	687.5	698.5	701.4	689.1	666.9
25°	818.7	808.2	803.0	780.5	766.9	755.0	762.4	776.5	780.5	765.4	729.5
27.5°	927.9	928.6	923.7	896.8	874.1	852.4	848.6	863.4	867.7	850.3	806.0
30°	1081.2	1065.2	1055.9	1023.5	991.2	960.7	945.0	951.1	952.2	931.5	880.0
32.5°	1213.3	1209.2	1189.0	1160.8	1119.3	1071.5	1045.3	1035.7	1033.8	1004.4	943.2
35°	1363.8	1361.5	1340.2	1306.6	1261.7	1195.4	1148.0	1120.4	1118.2	1076.9	1005.8
37.5°	1516.8	1516.8	1495.9	1459.1	1412.7	1329.7	1257.7	1213.9	1206.7	1152.9	1069.5
40°	1638.8	1631.4	1635.2	1619.7	1566.5	1478.4	1379.4	1316.0	1306.4	1241.8	1137.2
42.5°	1708.1	1705.6	1728.5	1745.8	1724.0	1653.6	1513.6	1426.6	1413.2	1339.6	1215.2
45°	1723.5	1720.9	1761.7	1824.9	1855.5	1826.6	1659.4	1543.0	1526.6	1441.9	1299.0
47.5°	1687.9	1682.5	1742.4	1842.2	1940.0	1991.0	1817.3	1669.3	1645.5	1541.4	1384.9
50°	1580.7	1575.5	1666.1	1798.7	1968.5	2102.7	1988.7	1803.2	1766.9	1648.2	1471.7
52.5°	1347.7	1350.1	1492.1	1674.2	1931.0	2172.2	2136.3	1944.3	1900.6	1757.5	1553.1
55°	1049.7	1055.1	1229.7	1430.2	1781.2	2161.6	2237.0	2089.7	2046.1	1860.2	1637.2
57.5°	751.6	775.4	938.9	1137.4	1493.4	1994.5	2259.0	2227.8	2185.6	1972.3	1719.5
60°	487.2	491.5	659.7	859.8	1137.2	1697.5	2214.3	2332.6	2299.6	2086.7	1788.4
62.5°	312.2	315.2	417.7	601.4	818.5	1255.9	2064.0	2378.1	2368.0	2162.3	1854.5
65°	229.5	227.2	280.6	397.5	551.3	774.5	1772.2	2356.1	2376.1	2209.6	1909.3
67.5°	191.6	188.4	214.6	275.2	406.2	439.8	1311.3	2213.2	2286.4	2204.3	1949.4
70°	174.6	171.8	187.8	204.4	316.9	294.5	661.0	1924.1	2036.7	2143.0	1942.9
72.5°	147.8	143.1	164.8	181.4	246.5	225.9	273.2	1477.9	1615.2	1946.8	1851.5
75°	114.6	111.5	130.1	159.7	185.3	176.3	172.7	897.5	1047.2	1505.5	1619.7
77.5°	90.8	86.6	103.6	124.5	166.7	133.0	125.9	386.5	534.9	961.1	1212.0
80°	68.4	64.6	78.7	98.5	128.1	100.2	81.4	157.6	201.6	487.0	609.5
82.5°	48.7	45.3	54.9	72.3	86.1	90.0	50.0	88.4	99.3	187.8	136.1
85°	31.2	29.1	36.8	45.3	54.7	57.9	30.5	46.2	50.7	77.4	56.8
87.5°	17.0	13.9	19.8	21.1	25.3	23.1	14.6	16.8	18.1	28.1	24.0
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: P959239
 CATALOG NUMBER: NAV-SB1A-727-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4	476.4
2.5°	478.3	478.9	481.1	481.9	483.4	485.4	486.8	488.1	488.1	489.4	489.4
5°	484.7	486.3	491.0	493.4	497.5	501.5	504.0	507.0	508.7	509.6	510.0
7.5°	497.3	499.8	506.5	510.8	517.7	523.3	527.2	531.2	532.1	534.5	533.6
10°	514.3	517.2	524.9	533.0	541.2	548.2	551.8	554.7	555.9	556.3	555.1
12.5°	533.8	538.1	548.0	557.8	566.6	572.7	573.6	572.9	569.7	567.0	567.0
15°	557.8	561.7	572.7	583.4	591.9	593.1	587.4	583.8	580.0	579.4	579.4
17.5°	586.6	588.6	598.7	609.3	609.9	606.1	597.8	594.4	590.8	588.3	588.6
20°	620.0	619.3	626.5	631.0	626.3	614.6	602.1	596.4	592.9	589.9	590.2
22.5°	659.9	654.8	653.8	652.7	640.2	615.7	598.7	591.5	585.9	581.9	583.2
25°	718.0	698.2	684.6	676.9	648.7	609.7	587.9	571.9	561.4	554.5	557.2
27.5°	790.7	757.5	722.9	704.3	648.7	597.4	561.9	536.1	518.9	511.7	515.3
30°	860.0	825.2	774.3	737.3	647.1	577.2	520.0	484.0	463.9	456.6	460.9
32.5°	919.2	881.3	828.8	773.4	643.3	544.4	467.9	428.2	408.7	400.2	404.5
35°	974.2	933.8	883.6	813.1	633.2	496.4	410.7	380.4	358.6	345.0	349.4
37.5°	1030.4	982.5	935.3	849.0	615.0	440.3	366.7	340.9	315.4	296.9	302.0
40°	1091.7	1034.2	990.8	870.3	585.2	386.9	332.6	309.1	282.0	262.4	266.3
42.5°	1163.3	1096.4	1052.5	881.3	544.4	349.0	310.5	287.3	261.8	245.8	249.0
45°	1237.9	1164.8	1108.7	881.1	498.9	331.3	303.3	280.3	252.2	235.5	238.2
47.5°	1316.2	1236.4	1157.4	866.7	459.4	333.7	299.2	265.4	234.2	218.0	220.3
50°	1394.7	1314.7	1204.5	839.8	442.6	328.4	284.2	244.3	207.5	192.9	193.8
52.5°	1472.6	1397.9	1245.2	801.4	425.5	308.4	264.9	216.9	196.5	186.4	186.4
55°	1550.8	1480.2	1289.3	745.6	382.9	285.1	232.6	206.5	187.8	178.6	177.6
57.5°	1629.3	1575.3	1331.3	689.7	329.2	256.4	214.8	194.0	179.0	171.2	169.8
60°	1711.0	1684.1	1374.5	638.4	276.3	219.6	201.9	183.9	168.7	159.9	159.3
62.5°	1795.1	1803.9	1408.5	572.2	227.7	197.2	190.2	171.8	157.0	148.7	148.5
65°	1880.0	1919.4	1430.6	480.4	184.6	175.9	177.6	158.6	143.6	136.4	136.1
67.5°	1943.8	2002.6	1424.3	363.6	151.4	155.7	162.0	144.6	130.6	124.9	125.2
70°	1951.0	1992.7	1362.4	249.0	126.7	135.9	144.4	131.0	116.4	112.3	112.6
72.5°	1855.5	1858.1	1189.9	162.7	107.2	119.3	126.1	117.1	102.9	98.9	98.7
75°	1604.9	1536.7	873.7	107.2	89.7	102.5	108.8	102.5	88.9	89.7	86.6
77.5°	1216.0	1088.3	530.4	76.3	74.9	86.1	94.6	90.2	78.5	88.1	77.6
80°	626.5	588.8	236.7	57.0	59.2	68.9	77.8	72.0	62.1	59.2	54.0
82.5°	143.6	166.9	93.3	40.8	42.8	49.6	59.4	54.0	44.6	37.7	37.2
85°	50.2	54.9	41.3	25.5	25.1	31.0	40.4	36.1	30.2	24.2	25.5
87.5°	15.9	20.9	15.5	10.4	10.8	13.9	18.7	17.0	14.1	9.2	9.6
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)