

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: P959958

Luminaire Tested: **NAV-SB1B-827-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959958
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-827-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3801.7 lumens
Efficiency: N/A
Efficacy: 95.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

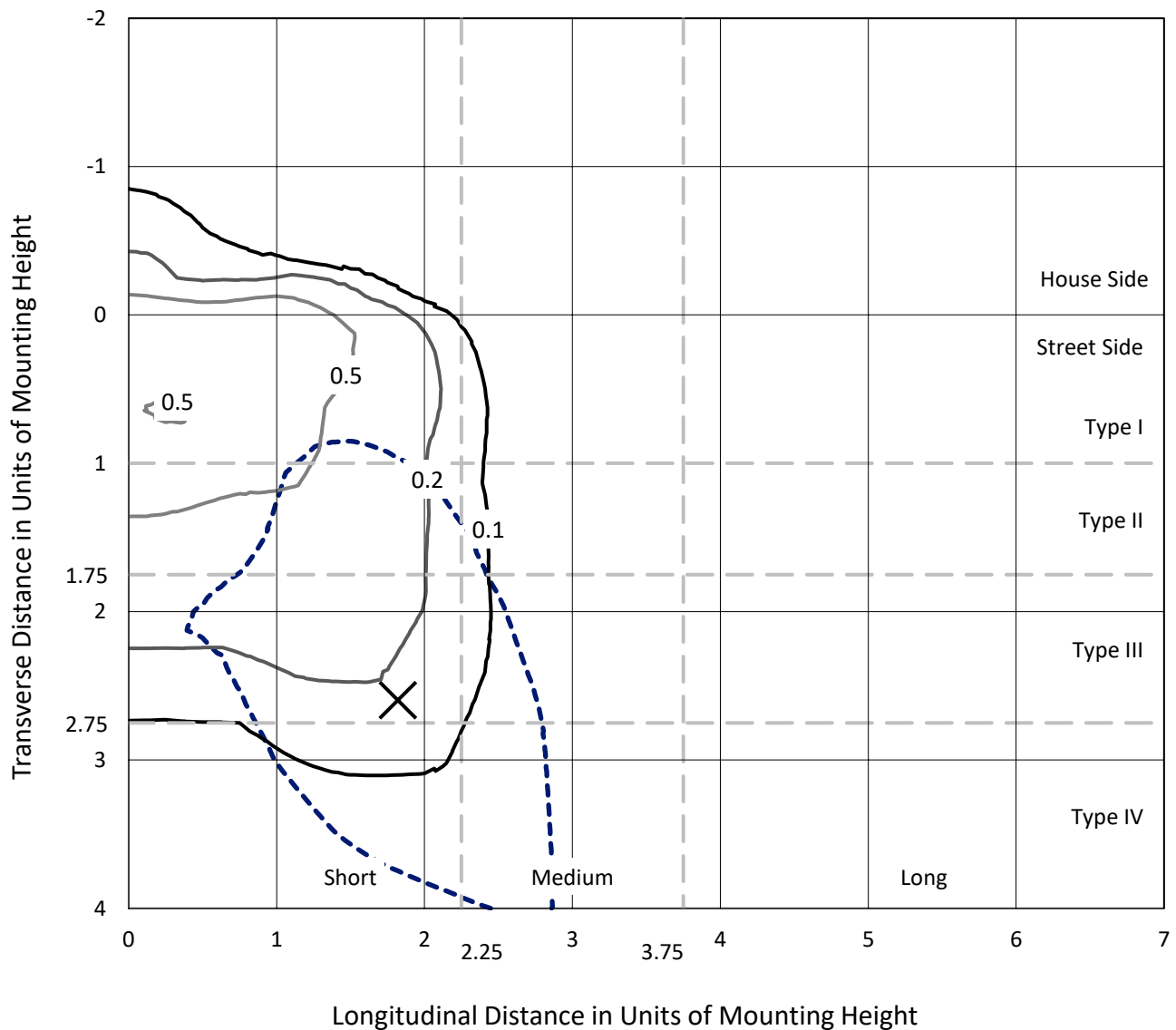
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P959958
CATALOG NUMBER: NAV-SB1B-827-U-T4FT-HSS

Iso-Footcandle Lines of Horizontal Illumination

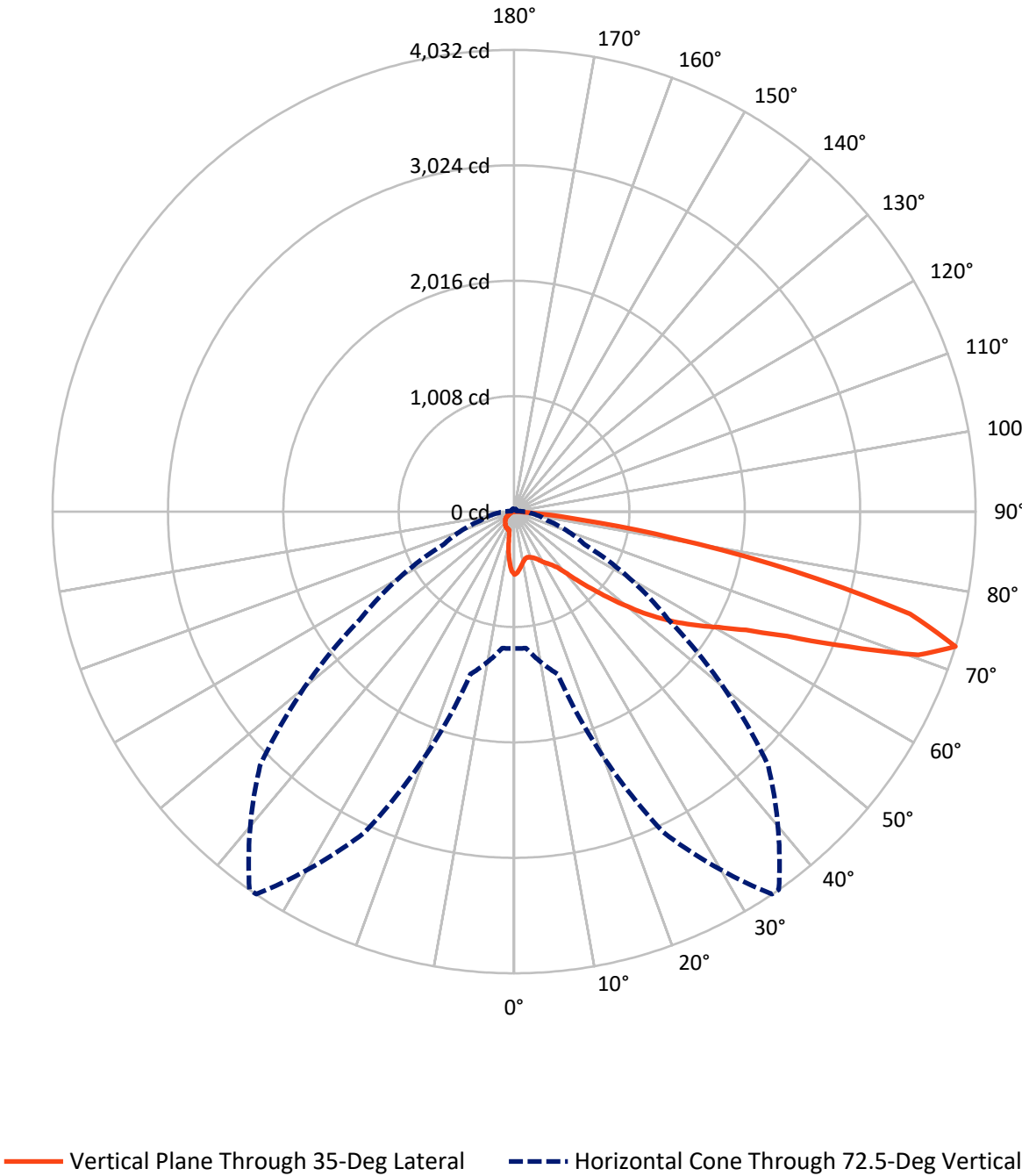
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
Type IV - Short - N/A

REPORT NUMBER: P959958
CATALOG NUMBER: NAV-SB1B-827-U-T4FT-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P959958

CATALOG NUMBER: NAV-SB1B-827-U-T4FT-HSS

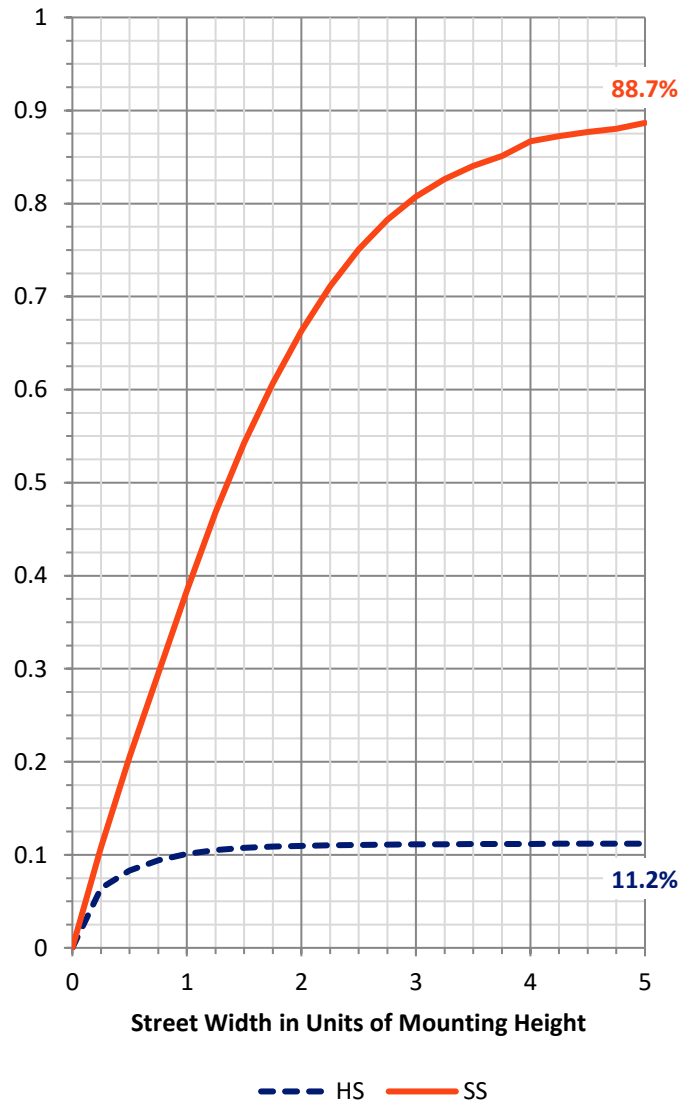
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	427.9	0.0	427.9
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	3373.8	0.0	3373.8
	% Fixture	88.7	0.0	88.7
Total	Lumens	3801.7	0.0	3801.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.3	1.2
10°-20°	105.9	2.8
20°-30°	172.1	4.5
30°-40°	287.1	7.6
40°-50°	543.2	14.3
50°-60°	863.1	22.7
60°-70°	1067.7	28.1
70°-80°	663.7	17.5
80°-90°	53.6	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°	3801.7	100.0
0°-180°	3801.7	100.0

Coefficient of Utilization



REPORT NUMBER: P959958

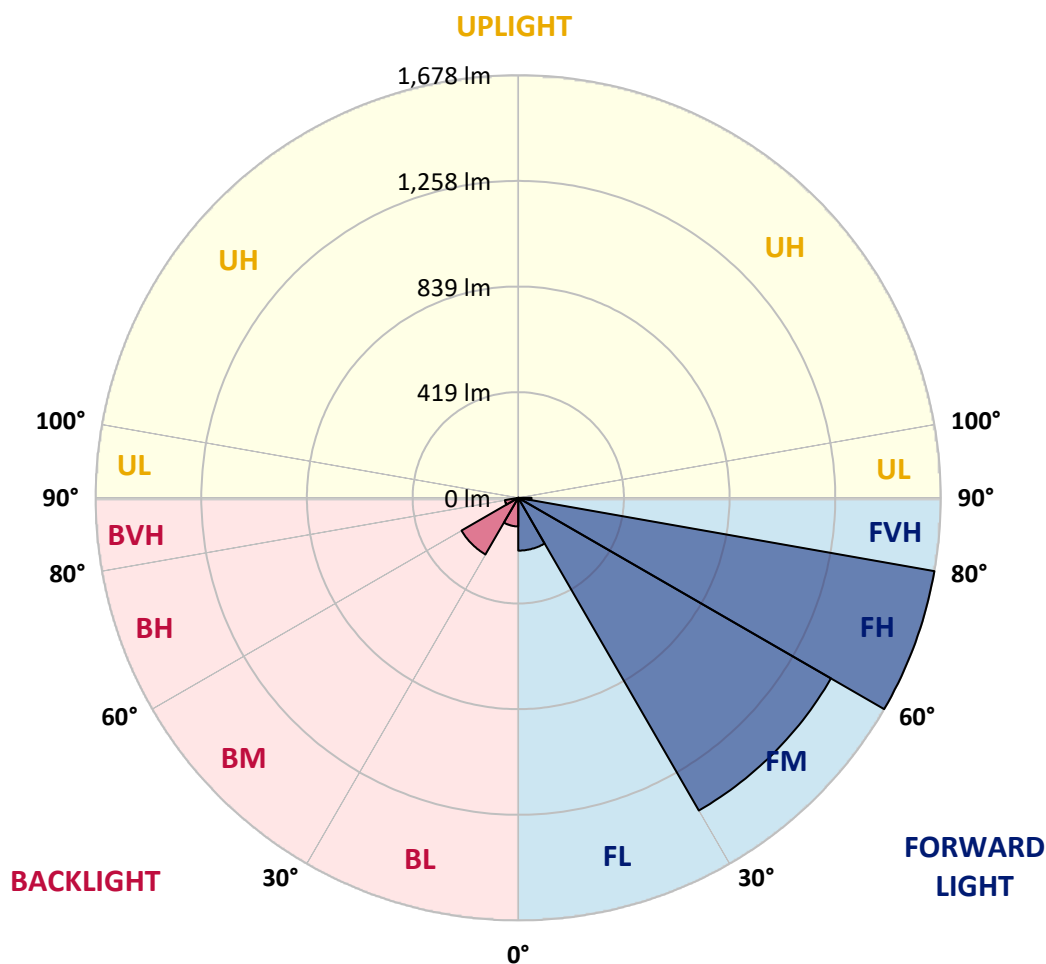
CATALOG NUMBER: NAV-SB1B-827-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	209.6	5.5			
FM	(30°-60°)	1433.6	37.7			
FH	(60°-80°)	1677.7	44.1			G1/1800
FVH	(80°-90°)	52.9	1.4			G1/100
BL	(0°-30°)	113.7	3.0	B1/500		
BM	(30°-60°)	259.8	6.8	B1/1000		
BH	(60°-80°)	53.7	1.4	B0/110		G0/110
BVH	(80°-90°)	0.7	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type IV Short



REPORT NUMBER: P959958

CATALOG NUMBER: NAV-SB1B-827-U-T4FT-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	551.0	551.0	551.0	551.0	551.0	551.0	551.0	551.0	551.0	551.0	551.0
2.5°	526.4	530.9	531.8	533.2	533.2	534.8	537.6	541.5	548.0	551.2	553.5
5°	485.2	488.6	492.8	496.1	502.6	503.4	514.2	524.8	539.6	550.7	558.5
7.5°	443.7	447.6	453.3	461.2	469.7	472.1	488.6	506.5	529.8	550.7	563.9
10°	414.5	414.8	419.8	427.8	441.3	444.3	464.3	489.7	519.0	547.3	568.9
12.5°	398.1	400.1	402.2	408.4	421.2	423.1	444.5	474.4	508.1	545.4	574.7
15°	398.1	399.4	400.9	404.0	414.2	415.9	434.8	464.6	502.6	546.2	584.1
17.5°	402.2	404.5	403.3	407.0	417.9	418.9	435.6	461.9	502.2	551.6	598.6
20°	412.3	413.9	411.7	413.9	424.8	427.0	444.3	467.2	507.0	560.8	616.7
22.5°	428.1	429.0	423.7	425.4	436.5	439.3	459.3	482.2	518.4	575.5	640.9
25°	448.2	449.9	441.8	443.7	454.4	457.7	480.8	504.7	536.5	595.8	671.9
27.5°	471.3	472.1	465.2	464.9	478.6	483.3	506.7	532.6	560.8	621.5	710.9
30°	497.8	500.3	493.6	492.5	509.7	513.6	536.8	566.8	596.4	659.9	766.3
32.5°	518.6	520.6	516.7	519.5	537.1	540.2	573.3	615.3	652.4	714.5	841.8
35°	548.8	549.9	541.0	546.0	566.0	573.8	623.1	683.3	722.8	783.0	940.4
37.5°	657.6	657.6	619.8	595.0	614.2	621.2	691.4	768.9	809.7	874.9	1064.7
40°	808.4	805.9	750.4	699.8	697.2	710.9	788.6	876.7	922.1	985.2	1204.5
42.5°	969.1	965.2	889.7	839.6	831.3	836.0	900.9	1009.5	1055.8	1119.8	1354.9
45°	1111.7	1110.6	1041.5	974.2	959.1	974.2	1041.0	1164.9	1198.1	1265.5	1505.1
47.5°	1231.2	1231.2	1180.8	1136.8	1129.0	1138.0	1230.7	1337.4	1334.3	1420.6	1651.3
50°	1368.9	1367.8	1319.8	1300.9	1308.9	1321.5	1449.0	1519.0	1475.3	1573.1	1782.0
52.5°	1465.2	1471.9	1455.5	1452.4	1493.6	1515.4	1670.9	1696.7	1601.5	1717.6	1879.7
55°	1541.6	1549.4	1568.4	1589.8	1669.1	1697.6	1885.6	1865.3	1707.0	1843.0	1936.0
57.5°	1649.6	1638.5	1667.8	1710.1	1838.5	1872.8	2093.7	2024.3	1792.0	1944.6	1942.2
60°	1780.8	1782.5	1787.5	1841.0	2007.6	2051.6	2298.7	2174.7	1846.6	2007.1	1874.2
62.5°	1938.5	1941.0	1951.3	2033.5	2234.6	2276.1	2517.1	2297.8	1871.6	1989.5	1698.6
65°	1927.6	1938.3	2053.3	2334.3	2579.7	2620.7	2772.0	2384.3	1833.8	1829.0	1383.0
67.5°	1756.0	1773.4	1965.8	2693.7	3100.1	3145.8	3080.0	2401.2	1670.2	1422.4	902.3
70°	1530.9	1537.1	1768.6	3016.9	3702.6	3748.9	3355.8	2214.3	1267.4	793.3	404.2
72.5°	1195.6	1197.0	1468.6	3091.8	4029.7	4032.2	3139.4	1643.8	681.6	304.7	140.4
75°	854.0	845.7	983.6	2507.4	3545.3	3573.7	2353.6	771.1	260.5	144.0	69.9
77.5°	458.0	467.2	556.6	1487.0	2449.1	2497.6	1284.2	222.3	132.6	98.1	46.2
80°	141.6	149.3	228.2	680.8	1387.2	1416.4	476.1	98.9	92.5	69.9	30.3
82.5°	44.6	46.2	106.4	286.1	575.7	589.2	137.9	56.0	63.2	46.2	17.8
85°	12.8	13.1	47.4	106.7	142.4	145.1	38.7	21.7	36.2	28.7	9.2
87.5°	1.4	4.4	17.8	17.8	12.5	12.3	4.2	4.7	10.4	3.6	1.6
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: P959958

CATALOG NUMBER: NAV-SB1B-827-U-T4FT-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	551.0	551.0	551.0	551.0	551.0	551.0	551.0	551.0	551.0	551.0	551.0
2.5°	552.1	552.4	548.8	542.6	536.0	530.3	523.5	517.8	513.9	512.8	514.8
5°	556.1	554.0	543.8	525.1	502.8	483.6	462.2	445.2	434.0	429.3	430.9
7.5°	561.9	556.3	533.7	496.9	454.4	416.5	378.0	348.2	329.2	319.8	321.1
10°	566.8	555.8	517.0	456.3	391.1	333.7	281.9	246.0	225.9	216.5	216.7
12.5°	571.6	555.4	495.3	408.1	319.8	249.6	201.4	183.6	178.0	176.1	175.5
15°	580.6	556.3	468.0	352.9	248.8	188.6	171.1	170.8	171.9	171.3	171.1
17.5°	592.8	557.1	437.1	294.5	191.9	166.3	165.4	168.0	169.6	168.8	168.5
20°	608.6	560.5	404.2	236.5	164.9	160.7	162.7	164.9	166.3	164.9	164.6
22.5°	631.0	566.3	368.3	189.9	156.3	157.3	159.1	161.5	163.0	161.0	160.7
25°	658.3	575.5	332.9	165.2	152.1	153.4	156.0	158.8	160.4	158.5	158.3
27.5°	693.6	590.3	300.3	159.6	147.9	148.7	152.4	156.5	158.8	156.3	156.3
30°	744.9	614.5	272.1	162.2	145.4	143.5	148.5	154.4	156.8	154.6	154.4
32.5°	812.8	648.7	254.9	166.0	144.3	137.4	142.1	149.5	153.8	152.4	152.4
35°	902.0	700.9	248.2	170.5	143.5	130.9	134.3	142.4	149.5	151.0	151.0
37.5°	1010.0	773.3	250.1	172.4	140.9	125.7	127.3	134.3	143.7	148.2	149.3
40°	1132.9	857.7	261.3	170.5	138.2	121.2	121.5	126.8	135.1	141.8	144.0
42.5°	1259.6	956.3	281.9	163.3	135.7	117.3	116.4	120.0	125.7	130.4	132.3
45°	1380.3	1057.7	302.3	153.2	132.6	113.4	111.4	112.9	114.0	115.9	117.0
47.5°	1485.5	1129.0	296.4	144.0	128.4	109.0	105.6	105.1	101.7	101.4	101.2
50°	1558.3	1144.6	263.2	134.8	122.3	103.9	98.6	95.2	89.4	86.6	86.9
52.5°	1581.4	1083.0	215.0	125.7	112.2	97.2	89.7	84.4	77.2	74.6	74.4
55°	1550.7	962.5	171.9	114.5	98.3	88.4	79.9	73.0	67.1	64.1	64.1
57.5°	1475.8	808.9	135.9	101.4	83.5	78.3	69.9	62.9	57.9	54.8	54.3
60°	1351.6	642.4	107.5	85.8	71.3	67.4	58.7	54.3	49.8	46.2	45.4
62.5°	1163.0	458.5	84.4	68.0	59.7	55.1	50.1	46.8	41.5	36.5	35.7
65°	907.5	280.5	65.2	49.8	47.9	45.7	42.6	39.6	33.1	28.1	27.3
67.5°	572.5	132.8	46.5	37.6	37.9	36.8	35.4	32.9	28.1	23.7	23.2
70°	252.2	64.4	30.6	28.7	28.1	28.1	29.2	28.4	24.0	19.8	19.0
72.5°	85.8	34.5	22.9	21.7	20.3	20.1	24.5	23.7	19.3	15.3	14.5
75°	44.9	23.2	16.7	15.6	12.3	14.8	19.5	18.3	13.6	10.0	9.2
77.5°	29.2	16.4	11.4	10.0	7.0	9.7	14.5	12.8	8.1	5.0	4.4
80°	18.3	10.9	6.7	4.7	3.4	5.3	7.8	5.5	3.1	1.1	0.8
82.5°	9.7	5.5	2.5	1.6	1.4	1.6	1.9	1.4	0.5	0.0	0.0
85°	3.9	1.9	0.8	0.5	0.3	0.0	0.5	0.3	0.0	0.0	0.0
87.5°	1.4	0.3	0.0	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)