

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: P959428

Luminaire Tested: **NAV-SB1A-827-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959428
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-827-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3330.2 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
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

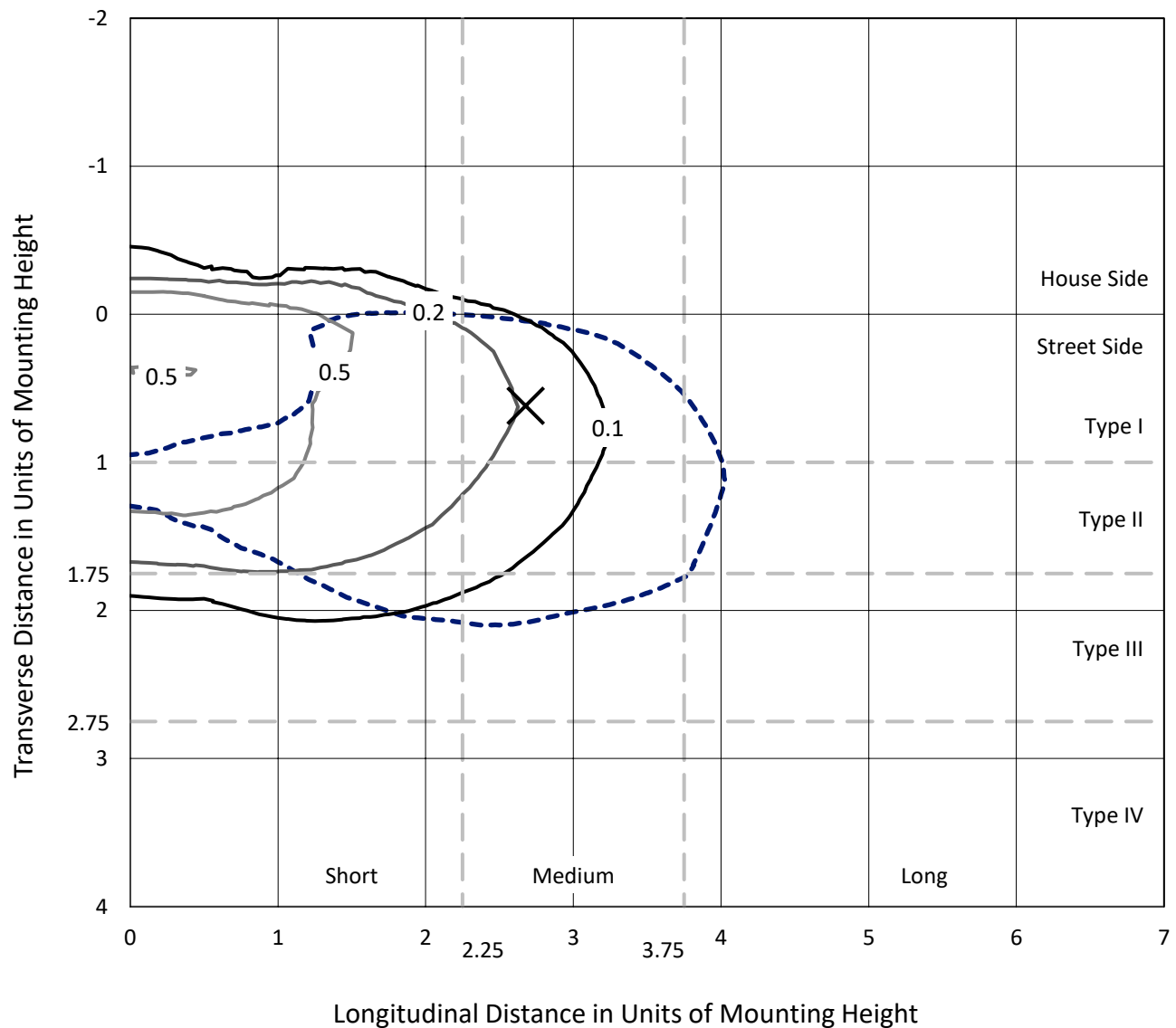


REPORT NUMBER: P959428

CATALOG NUMBER: NAV-SB1A-827-U-T3R-HSS

Iso-Footcandle Lines of Horizontal Illumination

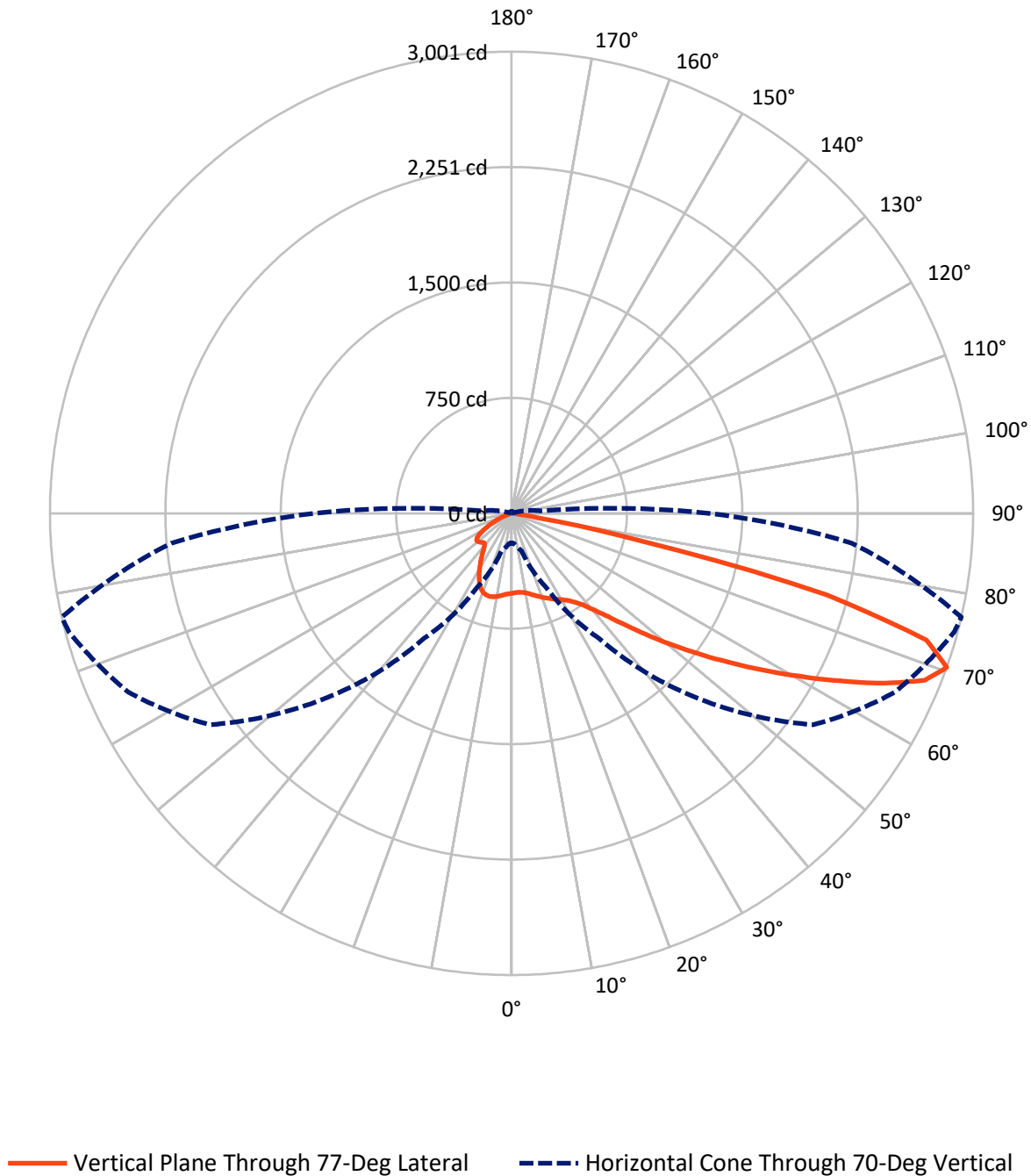
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc
Type III - Medium - N/A

REPORT NUMBER: P959428
CATALOG NUMBER: NAV-SB1A-827-U-T3R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P959428

CATALOG NUMBER: NAV-SB1A-827-U-T3R-HSS

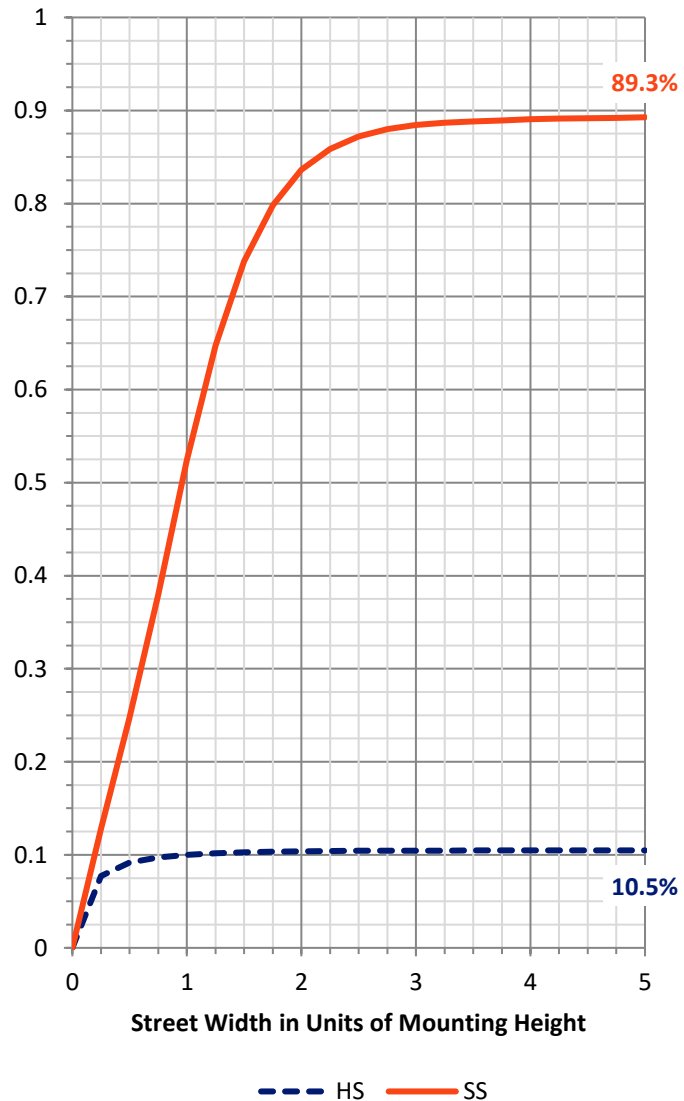
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	351.1	0.0	351.1
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	2979.2	0.0	2979.2
	% Fixture	89.5	0.0	89.5
Total	Lumens	3330.2	0.0	3330.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.8	1.3
10°-20°	106.3	3.2
20°-30°	164.4	4.9
30°-40°	298.3	9.0
40°-50°	563.0	16.9
50°-60°	813.5	24.4
60°-70°	866.0	26.0
70°-80°	458.9	13.8
80°-90°	15.1	0.5
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°	3330.2	100.0
0°-180°	3330.2	100.0

Coefficient of Utilization



REPORT NUMBER: P959428

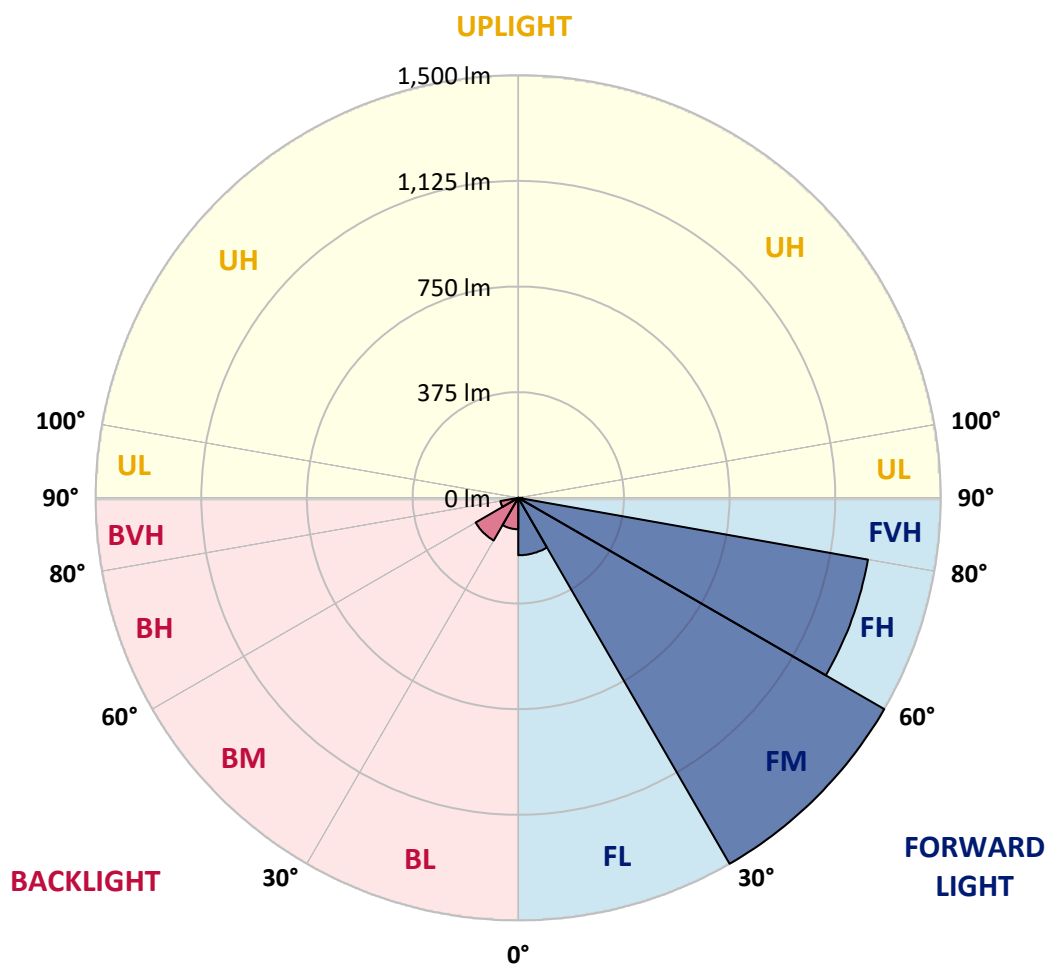
CATALOG NUMBER: NAV-SB1A-827-U-T3R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	203.9	6.1			
FM	(30°-60°)	1500.1	45.0			
FH	(60°-80°)	1260.5	37.9			G1/1800
FVH	(80°-90°)	14.7	0.4			G1/100
BL	(0°-30°)	111.5	3.3	B1/500		
BM	(30°-60°)	174.8	5.2	B0/220		
BH	(60°-80°)	64.4	1.9	B0/110		G0/110
BVH	(80°-90°)	0.4	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 III Medium



REPORT NUMBER: P959428

CATALOG NUMBER: NAV-SB1A-827-U-T3R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	519.5	519.5	519.5	519.5	519.5	519.5	519.5	519.5	519.5	519.5	519.5
2.5°	487.7	492.1	491.5	494.5	495.5	499.7	503.9	509.5	515.9	515.7	519.9
5°	460.1	464.5	465.7	469.7	474.7	481.1	489.8	501.1	512.9	514.9	523.3
7.5°	427.5	432.1	434.9	442.9	452.1	465.7	479.7	496.3	515.9	518.6	534.8
10°	394.9	399.1	402.7	414.1	428.9	448.7	471.7	495.7	521.9	525.9	548.9
12.5°	374.7	378.7	382.7	392.7	410.9	435.3	466.5	498.7	532.1	537.7	568.1
15°	367.6	371.2	374.3	383.1	400.3	427.9	465.5	504.7	544.9	552.5	591.2
17.5°	368.7	370.5	372.7	379.4	396.0	424.7	467.3	515.3	560.1	566.7	614.3
20°	374.7	375.8	376.1	380.7	395.3	424.1	471.1	525.3	574.3	583.4	637.2
22.5°	382.5	382.9	382.5	385.7	399.3	427.3	476.1	537.5	590.3	598.7	660.4
25°	418.9	410.9	400.9	394.7	406.1	433.5	483.7	553.9	607.8	616.0	682.9
27.5°	531.9	508.9	472.7	432.1	419.9	442.3	494.3	570.5	625.5	632.8	707.0
30°	715.2	685.2	623.8	532.3	464.5	460.7	507.9	587.2	644.2	652.2	732.9
32.5°	899.0	891.6	820.8	694.2	564.9	502.0	530.6	609.7	669.0	675.3	767.8
35°	1085.0	1070.0	1012.0	886.8	719.4	585.9	568.5	639.1	701.6	708.7	818.8
37.5°	1227.3	1218.3	1182.3	1079.3	902.8	715.4	633.2	684.8	748.9	756.9	884.0
40°	1353.1	1348.9	1336.7	1268.7	1107.9	885.0	734.0	755.4	814.5	824.0	963.8
42.5°	1451.9	1461.9	1468.8	1449.9	1319.3	1078.4	869.4	854.6	906.0	915.6	1065.6
45°	1553.1	1556.5	1584.4	1611.8	1529.1	1280.7	1022.1	971.0	1019.8	1031.8	1187.6
47.5°	1618.1	1631.6	1680.8	1729.0	1705.6	1481.4	1186.1	1108.3	1151.6	1174.1	1324.3
50°	1622.9	1648.4	1716.1	1800.0	1834.0	1672.4	1364.5	1264.7	1310.9	1335.7	1470.3
52.5°	1542.4	1581.9	1686.8	1809.6	1903.5	1834.0	1548.9	1421.3	1480.3	1512.7	1621.7
55°	1182.5	1234.3	1576.9	1757.1	1906.2	1956.7	1728.5	1584.2	1669.2	1705.8	1785.2
57.5°	1030.3	1056.4	1239.7	1665.8	1855.6	2006.1	1890.8	1739.4	1874.6	1920.1	1939.8
60°	857.2	891.4	1039.8	1516.5	1786.8	2010.9	2034.3	1939.6	2097.4	2148.5	2081.6
62.5°	582.5	619.8	767.2	1259.9	1692.8	2008.6	2151.9	2145.7	2344.9	2399.8	2201.7
65°	360.9	384.3	481.3	1028.8	1561.3	2011.2	2274.9	2396.0	2606.1	2661.8	2294.7
67.5°	285.2	295.9	346.6	789.9	1334.9	1954.4	2397.7	2631.4	2852.0	2896.1	2323.1
70°	191.6	198.1	252.2	529.5	993.0	1692.4	2395.4	2749.6	2978.5	3000.7	2219.5
72.5°	101.0	106.0	147.4	245.2	599.8	1202.9	2019.1	2608.2	2852.6	2819.4	1897.2
75°	50.4	58.8	99.2	124.5	256.1	670.9	1253.9	2056.4	2245.3	2116.5	1217.3
77.5°	38.2	46.2	82.0	82.0	89.2	225.9	531.1	1121.6	1034.5	861.4	357.3
80°	24.4	31.6	71.8	62.0	37.2	57.4	138.4	314.2	219.8	167.2	65.0
82.5°	14.3	20.6	59.8	41.0	20.8	21.2	39.2	66.8	57.0	44.4	20.0
85°	5.6	13.4	41.0	16.2	8.2	5.2	11.8	14.3	11.8	8.8	5.0
87.5°	0.0	3.2	7.2	0.0	0.6	0.4	0.8	1.0	1.0	0.8	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: P959428

CATALOG NUMBER: NAV-SB1A-827-U-T3R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	519.5	519.5	519.5	519.5	519.5	519.5	519.5	519.5	519.5	519.5	519.5
2.5°	521.7	522.2	523.5	523.7	520.7	516.9	515.5	514.9	512.3	512.1	512.5
5°	528.1	529.9	528.1	522.6	509.5	491.3	477.4	466.1	455.7	452.5	450.7
7.5°	540.7	542.6	536.9	515.5	482.7	446.3	413.5	390.3	369.5	361.7	358.5
10°	558.8	561.3	543.5	500.1	442.1	383.6	328.1	288.9	258.5	246.1	240.8
12.5°	581.5	582.5	547.0	476.7	389.3	305.8	227.1	185.3	158.2	148.0	144.9
15°	606.5	605.1	547.5	445.1	317.3	216.2	148.2	121.8	110.8	107.4	107.4
17.5°	632.8	626.7	539.0	399.1	238.5	147.8	110.0	103.7	101.8	101.0	100.8
20°	658.7	645.0	523.7	339.2	171.2	110.4	99.9	98.0	97.0	96.6	96.1
22.5°	682.2	658.9	497.3	269.6	124.3	97.6	94.4	92.8	90.8	90.0	89.8
25°	705.2	666.9	460.3	204.6	99.4	91.2	88.8	85.6	83.0	82.0	81.6
27.5°	727.4	671.9	414.1	151.4	88.8	85.4	80.8	76.4	74.4	74.0	73.6
30°	751.2	673.6	361.5	113.0	82.2	78.0	71.3	66.2	65.2	65.4	65.4
32.5°	780.2	676.1	308.5	92.6	76.8	69.2	61.2	56.0	55.1	56.0	55.8
35°	815.0	681.2	257.4	85.2	72.0	60.2	51.6	47.2	46.2	46.9	46.6
37.5°	862.0	689.4	209.7	83.7	68.0	52.6	43.4	39.8	39.8	40.0	39.8
40°	924.8	711.2	167.0	82.6	65.8	46.9	36.6	35.2	35.8	36.2	36.2
42.5°	1001.0	757.8	138.2	81.4	63.6	44.4	33.2	32.6	33.6	34.0	34.0
45°	1086.6	816.6	128.1	79.3	61.4	46.0	31.8	31.0	32.2	32.4	32.6
47.5°	1175.2	874.2	126.8	77.0	59.3	48.6	31.4	29.4	31.0	31.2	31.4
50°	1264.7	911.8	128.1	73.4	56.0	48.6	31.6	28.0	29.2	29.8	30.0
52.5°	1355.0	929.2	127.2	65.6	50.0	45.6	31.6	26.8	28.0	28.4	28.4
55°	1442.5	925.8	114.4	54.0	42.4	40.4	30.7	25.6	26.5	26.8	26.8
57.5°	1511.7	878.8	90.6	42.0	34.4	33.6	28.0	24.4	25.0	24.8	24.8
60°	1547.9	775.8	64.8	32.4	27.2	26.5	24.6	22.8	23.2	22.0	21.8
62.5°	1548.3	639.5	43.4	25.6	21.6	21.0	21.0	20.4	20.0	17.8	17.2
65°	1515.3	488.3	28.8	20.4	17.4	16.4	17.6	17.4	16.0	13.0	12.6
67.5°	1440.4	320.1	21.8	16.0	13.4	12.8	14.0	14.8	13.6	11.0	10.8
70°	1286.5	186.3	18.0	12.4	10.0	9.4	11.4	12.6	11.4	8.8	8.4
72.5°	1068.6	100.6	14.8	9.2	7.0	6.4	9.0	10.4	9.0	6.6	6.4
75°	693.4	53.8	11.4	6.1	3.6	4.0	6.8	7.6	6.4	4.2	3.8
77.5°	232.8	23.8	7.2	3.0	1.6	1.6	4.0	4.6	3.0	1.4	1.2
80°	52.0	9.8	3.0	1.2	0.6	0.6	0.8	0.8	0.4	0.0	0.0
82.5°	17.0	4.0	1.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.6	1.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.6	0.2	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)