

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: P959459

Luminaire Tested: **NAV-SB1A-830-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959459
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-830-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 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: 3440.9 lumens
Efficiency: N/A
Efficacy: 111.4 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



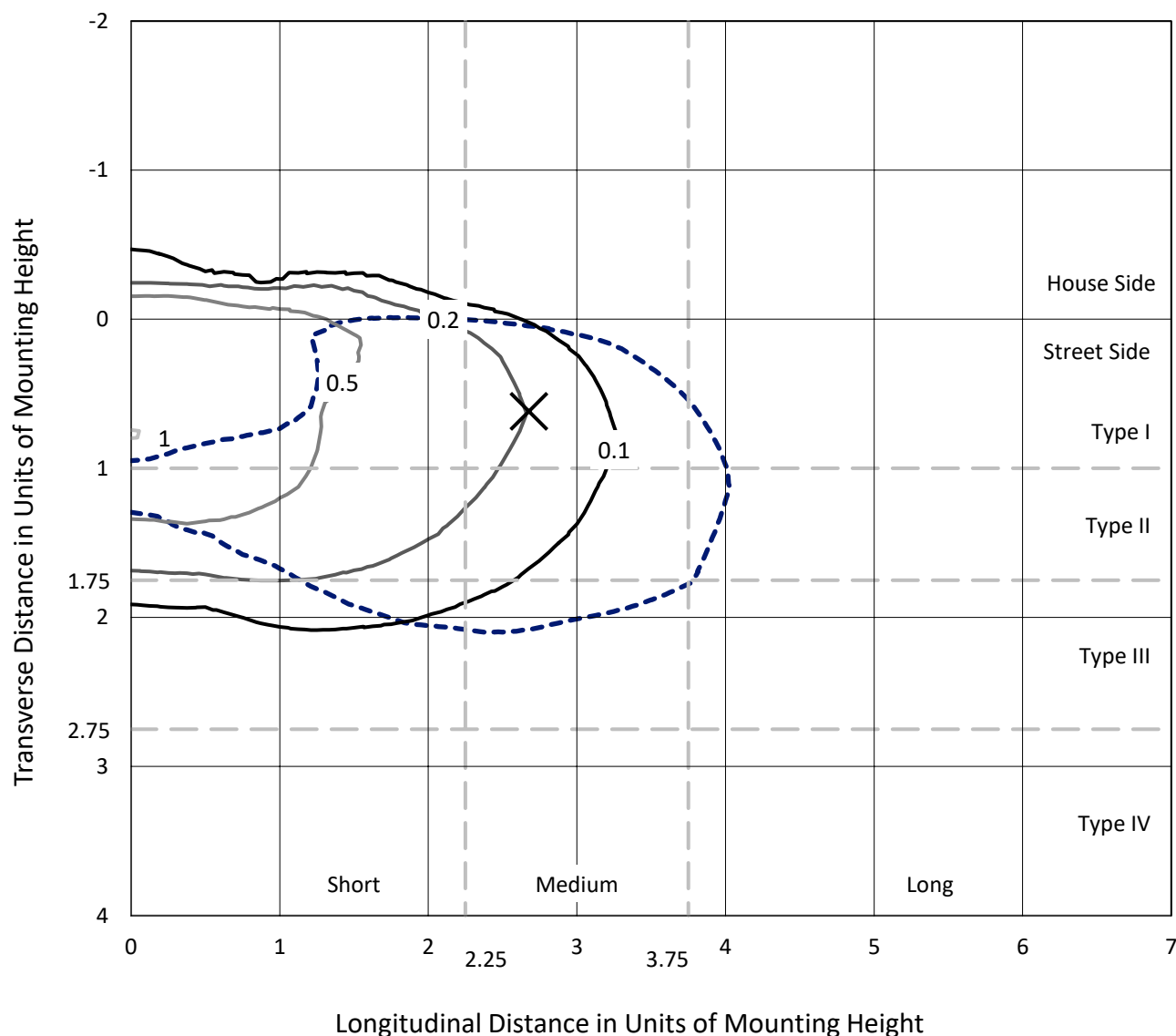
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

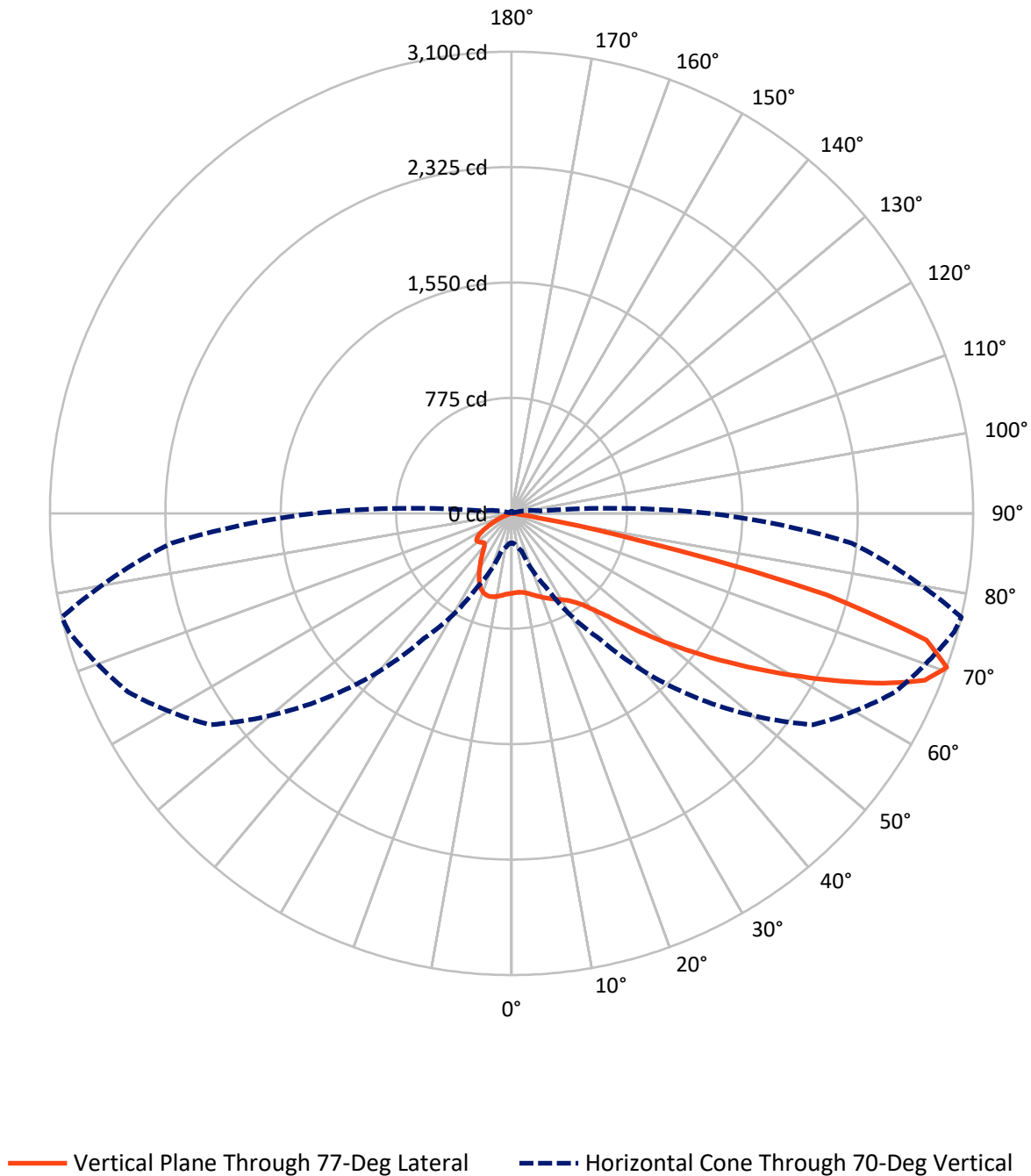
--- 1/2 Max cd



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

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Luminous Intensity Polar Plot



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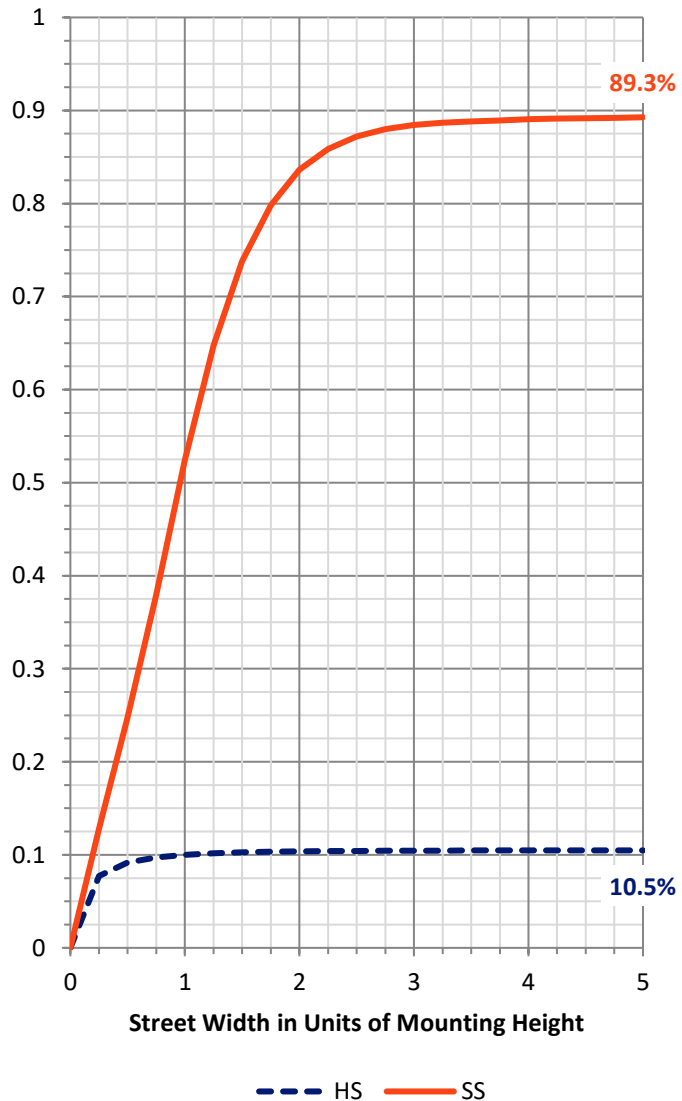
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	362.7	0.0	362.7
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	3078.2	0.0	3078.2
	% Fixture	89.5	0.0	89.5
Total	Lumens	3440.9	0.0	3440.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.3	1.3
10°-20°	109.8	3.2
20°-30°	169.8	4.9
30°-40°	308.2	9.0
40°-50°	581.7	16.9
50°-60°	840.6	24.4
60°-70°	894.8	26.0
70°-80°	474.2	13.8
80°-90°	15.6	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°	3440.9	100.0
0°-180°	3440.9	100.0

Coefficient of Utilization



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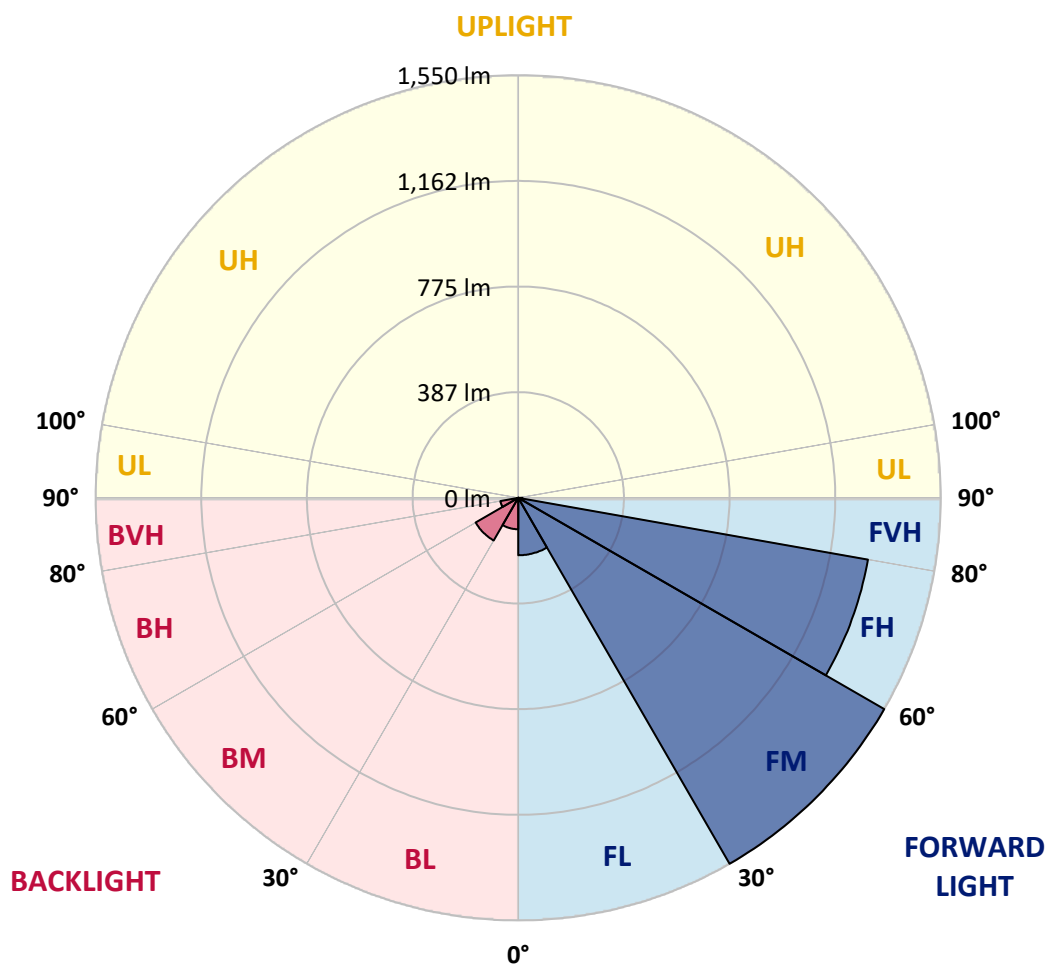
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	210.7	6.1			
FM	(30°-60°)	1549.9	45.0			
FH	(60°-80°)	1302.4	37.9			G1/1800
FVH	(80°-90°)	15.1	0.4			G1/100
BL	(0°-30°)	115.2	3.3	B1/500		
BM	(30°-60°)	180.6	5.2	B0/220		
BH	(60°-80°)	66.5	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	536.7	536.7	536.7	536.7	536.7	536.7	536.7	536.7	536.7	536.7	536.7
2.5°	503.9	508.5	507.8	510.9	512.0	516.3	520.6	526.5	533.0	532.8	537.2
5°	475.4	480.0	481.1	485.2	490.5	497.1	506.0	517.8	530.0	532.0	540.6
7.5°	441.8	446.6	449.4	457.7	467.2	481.1	495.7	512.8	533.0	535.9	552.6
10°	408.1	412.5	416.2	427.8	443.1	463.7	487.4	512.2	539.4	543.5	567.1
12.5°	387.2	391.3	395.4	405.7	424.6	449.8	482.0	515.2	549.8	555.7	586.9
15°	379.9	383.6	386.8	396.0	413.5	442.2	480.8	521.5	563.0	570.8	610.8
17.5°	380.9	382.8	385.1	392.0	409.2	438.7	482.9	532.4	578.6	585.6	634.7
20°	387.2	388.3	388.5	393.3	408.6	438.3	486.8	542.8	593.5	602.8	658.4
22.5°	395.2	395.6	395.2	398.5	412.7	441.6	492.0	555.4	610.0	618.7	682.3
25°	432.9	424.6	414.2	407.8	419.6	447.8	499.8	572.4	628.0	636.4	705.6
27.5°	549.5	525.8	488.5	446.6	434.0	456.9	510.7	589.5	646.3	653.8	730.5
30°	739.0	708.0	644.5	550.0	480.0	476.1	524.8	606.7	665.5	673.8	757.3
32.5°	929.0	921.4	848.1	717.3	583.6	518.6	548.3	630.0	691.3	697.7	793.3
35°	1121.0	1105.6	1045.6	916.4	743.3	605.4	587.3	660.4	724.9	732.3	845.9
37.5°	1268.1	1258.8	1221.6	1115.2	932.9	739.2	654.3	707.6	773.8	782.1	913.3
40°	1398.1	1393.7	1381.1	1311.0	1144.7	914.4	758.4	780.5	841.6	851.4	995.9
42.5°	1500.2	1510.4	1517.6	1498.0	1363.1	1114.3	898.3	883.1	936.1	946.1	1101.1
45°	1604.7	1608.2	1637.1	1665.3	1579.9	1323.4	1056.1	1003.3	1053.7	1066.1	1227.0
47.5°	1671.9	1685.8	1736.7	1786.4	1762.3	1530.6	1225.6	1145.1	1189.9	1213.2	1368.3
50°	1676.9	1703.1	1773.1	1859.9	1895.0	1727.9	1409.8	1306.8	1354.4	1380.1	1519.2
52.5°	1593.7	1634.5	1742.9	1869.8	1966.8	1895.0	1600.4	1468.5	1529.5	1563.0	1675.6
55°	1221.9	1275.3	1629.2	1815.5	1969.5	2021.7	1786.0	1636.9	1724.7	1762.5	1844.6
57.5°	1064.6	1091.5	1280.9	1721.2	1917.2	2072.8	1953.8	1797.2	1936.9	1983.9	2004.4
60°	885.7	921.2	1074.3	1566.9	1846.1	2077.8	2101.9	2004.1	2167.1	2219.9	2150.8
62.5°	601.9	640.4	792.7	1301.9	1749.1	2075.4	2223.3	2217.1	2422.9	2479.6	2274.9
65°	372.9	397.0	497.4	1063.0	1613.2	2078.0	2350.5	2475.7	2692.8	2750.3	2370.9
67.5°	294.7	305.8	358.1	816.2	1379.1	2019.4	2477.4	2718.8	2946.8	2992.4	2400.2
70°	197.9	204.7	260.6	547.1	1026.0	1748.5	2475.0	2840.9	3077.6	3100.4	2293.3
72.5°	104.3	109.5	152.3	253.4	619.7	1242.9	2086.3	2694.9	2947.4	2913.0	1960.2
75°	52.2	60.9	102.6	128.6	264.7	693.2	1295.5	2124.7	2319.9	2186.8	1257.7
77.5°	39.6	47.8	84.8	84.8	92.1	233.4	548.7	1158.9	1068.9	890.0	369.2
80°	25.2	32.6	74.1	64.1	38.4	59.3	143.0	324.6	227.0	172.7	67.1
82.5°	14.8	21.3	61.7	42.3	21.5	21.9	40.4	69.1	58.9	45.8	20.6
85°	5.8	13.9	42.3	16.7	8.5	5.4	12.2	14.8	12.2	9.1	5.2
87.5°	0.0	3.3	7.4	0.0	0.6	0.4	0.8	1.1	1.1	0.8	1.7
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°	536.7	536.7	536.7	536.7	536.7	536.7	536.7	536.7	536.7	536.7	536.7
2.5°	539.2	539.6	540.9	541.1	538.0	534.1	532.6	532.0	529.3	529.1	529.5
5°	545.6	547.6	545.6	540.0	526.5	507.6	493.2	481.5	470.9	467.6	465.7
7.5°	558.6	560.7	554.7	532.6	498.7	461.1	427.2	403.3	381.8	373.7	370.5
10°	577.4	579.9	561.5	516.7	456.7	396.4	339.0	298.6	267.0	254.2	248.8
12.5°	600.9	601.9	565.2	492.6	402.2	315.9	234.7	191.5	163.4	152.9	149.8
15°	626.7	625.1	565.6	459.8	327.9	223.3	153.2	125.8	114.5	111.0	111.0
17.5°	653.8	647.5	556.9	412.5	246.4	152.7	113.7	107.1	105.2	104.3	104.0
20°	680.6	666.5	541.1	350.5	176.9	114.1	103.2	101.3	100.1	99.7	99.3
22.5°	704.9	680.8	513.9	278.6	128.4	100.9	97.6	95.8	93.9	93.0	92.8
25°	728.6	689.0	475.7	211.5	102.8	94.3	91.7	88.5	85.8	84.8	84.4
27.5°	751.6	694.2	427.8	156.4	91.7	88.3	83.4	78.9	76.9	76.5	76.1
30°	776.2	696.0	373.5	116.6	85.0	80.7	73.7	68.5	67.3	67.5	67.5
32.5°	806.2	698.6	318.8	95.6	79.3	71.4	63.2	57.8	56.9	57.8	57.6
35°	842.0	703.9	266.0	88.0	74.3	62.1	53.2	48.7	47.8	48.5	48.3
37.5°	890.7	712.3	216.7	86.5	70.2	54.3	44.8	41.1	41.1	41.3	41.1
40°	955.4	734.9	172.5	85.4	68.1	48.5	37.8	36.3	36.9	37.4	37.4
42.5°	1034.3	782.9	142.8	84.0	65.6	45.8	34.3	33.7	34.7	35.2	35.2
45°	1122.8	843.8	132.3	81.9	63.4	47.6	32.8	32.0	33.2	33.4	33.7
47.5°	1214.2	903.3	131.0	79.5	61.3	50.2	32.4	30.4	32.0	32.2	32.4
50°	1306.8	942.2	132.3	75.8	57.8	50.2	32.6	28.9	30.2	30.9	31.1
52.5°	1400.0	960.0	131.5	67.8	51.8	47.2	32.6	27.6	28.9	29.3	29.3
55°	1490.5	956.5	118.2	55.9	43.9	41.7	31.8	26.5	27.4	27.6	27.6
57.5°	1561.9	908.0	93.7	43.5	35.7	34.7	28.9	25.2	25.8	25.6	25.6
60°	1599.3	801.7	66.9	33.4	28.0	27.4	25.4	23.5	23.9	22.9	22.5
62.5°	1599.7	660.8	44.8	26.5	22.3	21.7	21.7	21.1	20.6	18.4	17.8
65°	1565.6	504.6	29.7	21.1	18.0	16.9	18.2	18.0	16.5	13.4	13.0
67.5°	1488.3	330.8	22.5	16.5	13.9	13.2	14.6	15.2	14.1	11.3	11.1
70°	1329.2	192.5	18.7	12.8	10.5	9.7	11.7	13.0	11.7	9.1	8.7
72.5°	1104.1	103.8	15.2	9.5	7.2	6.6	9.3	10.7	9.3	6.8	6.6
75°	716.5	55.7	11.7	6.3	3.7	4.1	7.0	7.8	6.6	4.3	3.9
77.5°	240.6	24.6	7.4	3.1	1.7	1.7	4.1	4.8	3.1	1.5	1.3
80°	53.7	10.2	3.1	1.3	0.6	0.6	0.8	0.8	0.4	0.0	0.0
82.5°	17.6	4.1	1.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.8	1.5	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)