

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: P959452

Luminaire Tested: **NAV-SB1A-830-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959452
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-830-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH
HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3017.6 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - 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



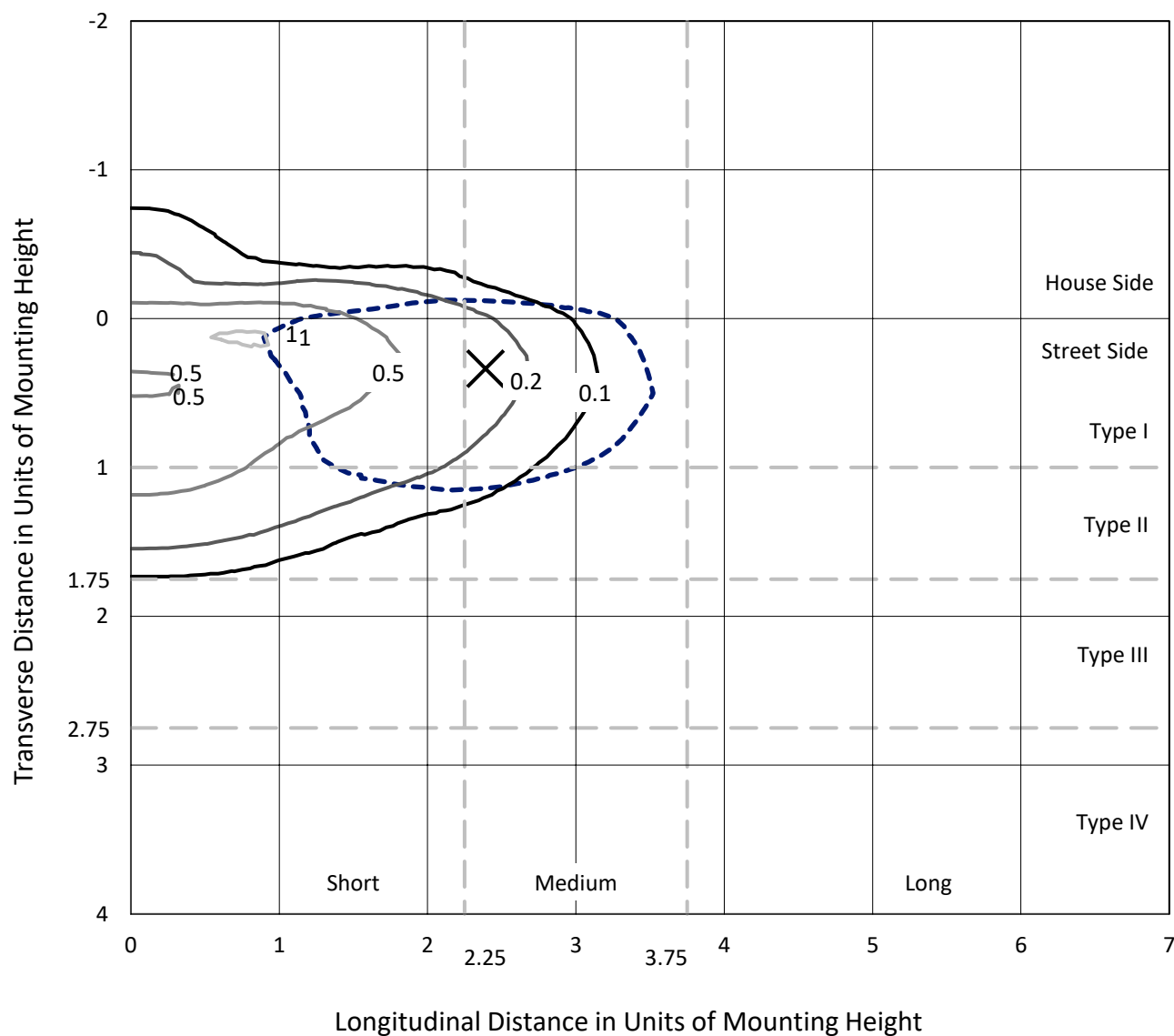
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

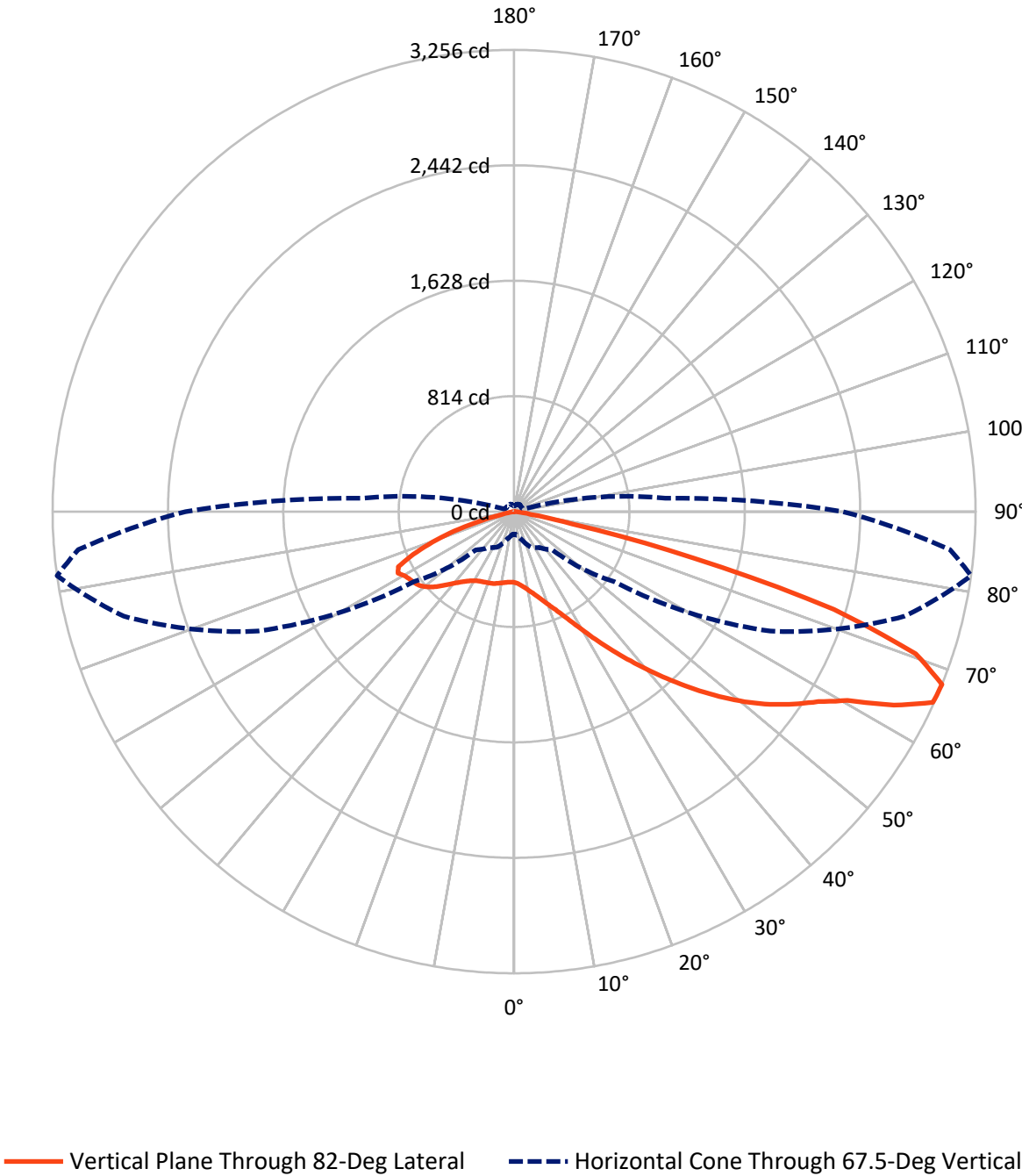
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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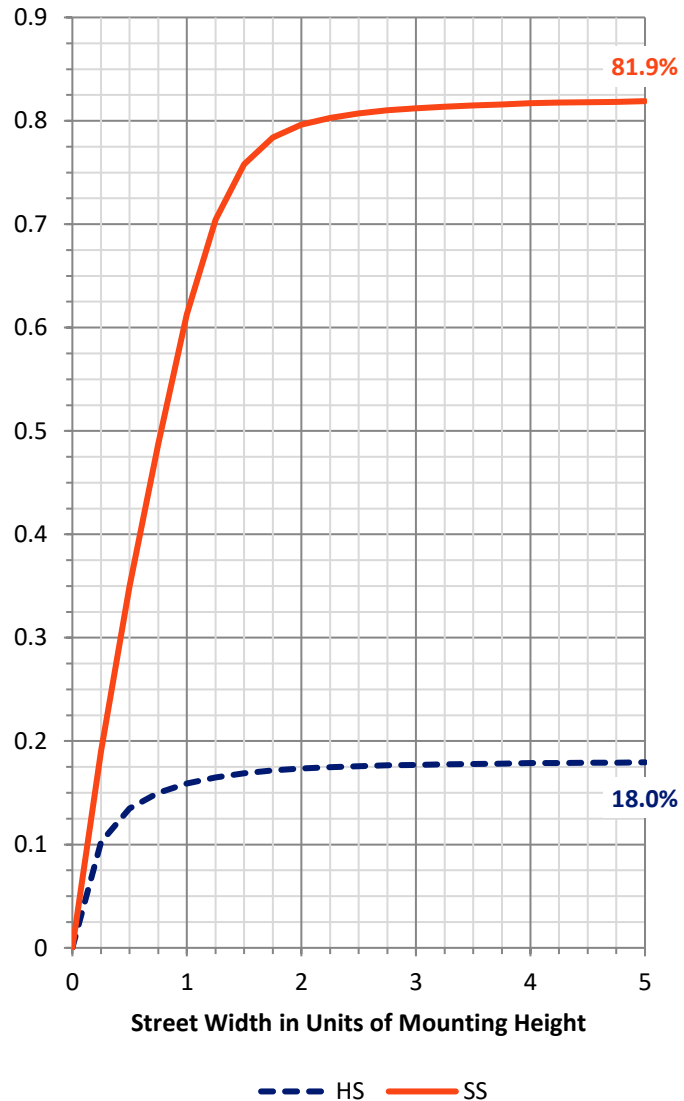
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	546.6	0.0	546.6
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	2471.0	0.0	2471.0
	% Fixture	81.9	0.0	81.9
Total	Lumens	3017.6	0.0	3017.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.5	1.5
10°-20°	115.7	3.8
20°-30°	185.4	6.1
30°-40°	327.8	10.9
40°-50°	574.3	19.0
50°-60°	766.0	25.4
60°-70°	713.1	23.6
70°-80°	273.7	9.1
80°-90°	17.0	0.6
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°	3017.6	100.0
0°-180°	3017.6	100.0

Coefficient of Utilization



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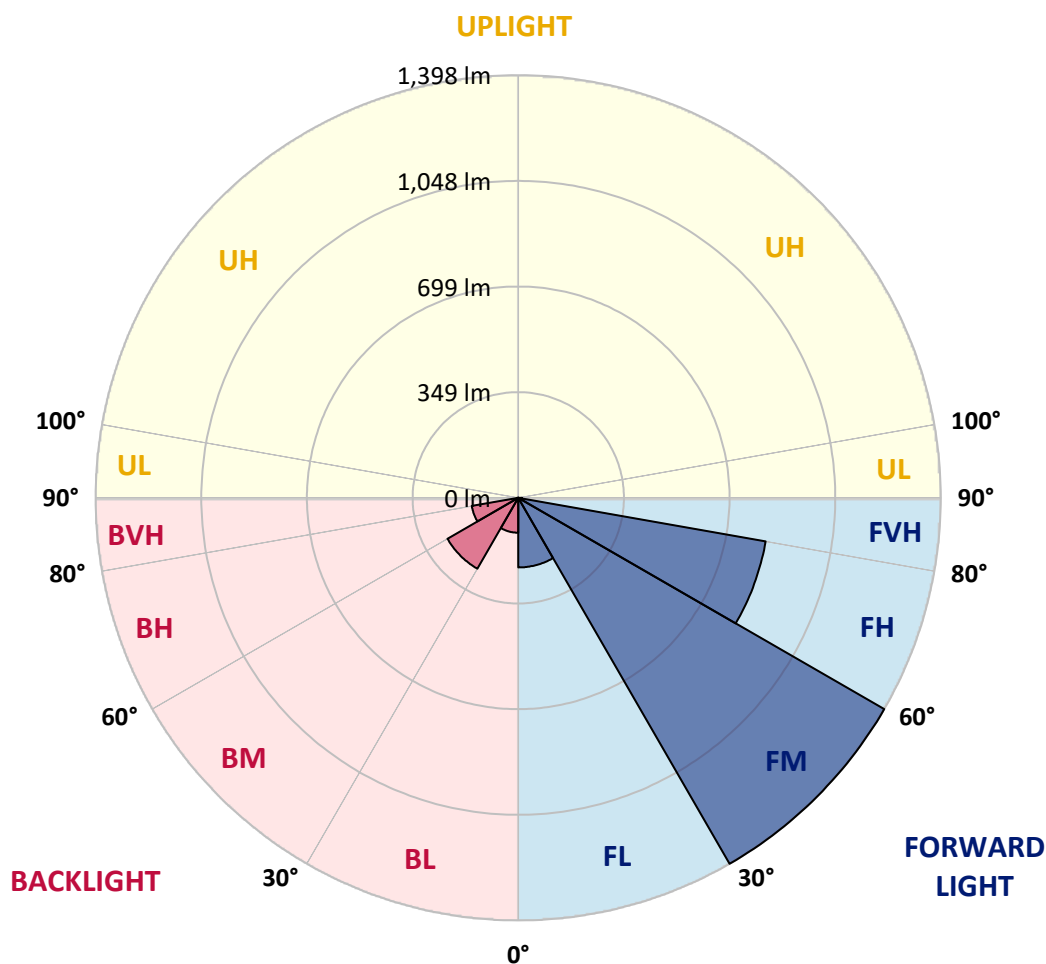
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	230.2	7.6			
FM	(30°-60°)	1397.6	46.3			
FH	(60°-80°)	830.8	27.5			G1/1800
FVH	(80°-90°)	12.4	0.4			G1/100
BL	(0°-30°)	115.4	3.8	B1/500		
BM	(30°-60°)	270.5	9.0	B1/1000		
BH	(60°-80°)	156.0	5.2	B1/500		G1/500
BVH	(80°-90°)	4.6	0.2			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	499.9	499.9	499.9	499.9	499.9	499.9	499.9	499.9	499.9	499.9	499.9
2.5°	528.4	531.5	529.7	528.8	527.3	525.1	523.4	517.9	512.3	508.6	507.3
5°	539.0	542.0	541.8	542.7	543.8	544.5	544.0	537.9	529.9	523.6	519.9
7.5°	529.9	533.4	536.2	540.6	548.2	556.2	560.1	558.8	550.5	541.8	537.3
10°	504.0	507.8	514.4	524.7	540.8	558.1	572.7	579.4	574.2	564.7	558.3
12.5°	456.6	460.3	473.7	495.8	522.8	552.9	580.8	598.8	600.0	590.5	583.1
15°	403.4	407.1	421.3	449.1	490.2	538.6	585.1	619.2	630.7	622.5	613.6
17.5°	370.4	373.7	384.4	406.7	449.5	509.9	583.5	640.9	667.2	660.7	650.1
20°	360.4	363.3	368.3	383.9	419.5	480.1	573.6	661.3	706.5	702.8	690.8
22.5°	371.0	373.7	375.3	382.1	404.6	460.6	561.0	682.2	752.1	752.6	738.0
25°	395.6	398.2	396.5	400.9	410.6	454.5	556.2	706.7	809.5	814.3	797.8
27.5°	436.0	436.2	432.1	431.9	433.5	463.6	561.2	733.1	881.8	890.7	870.3
30°	517.1	513.8	497.9	480.8	472.9	491.0	575.1	764.1	967.2	983.1	957.5
32.5°	642.0	637.2	608.1	567.0	525.7	535.2	600.0	799.5	1060.3	1088.9	1057.6
35°	777.6	776.2	745.9	684.8	612.6	597.9	640.7	846.0	1161.7	1207.3	1170.1
37.5°	903.5	902.9	885.6	813.6	725.9	685.4	705.9	906.8	1270.3	1336.4	1292.5
40°	1018.7	1020.7	1003.3	939.0	850.5	797.8	794.5	982.1	1391.1	1476.9	1424.7
42.5°	1118.3	1120.4	1102.8	1055.2	973.7	922.1	903.3	1074.1	1509.1	1627.9	1566.2
45°	1185.8	1199.2	1196.7	1158.7	1100.2	1046.5	1034.1	1189.7	1643.6	1788.0	1715.7
47.5°	1204.9	1217.3	1236.9	1242.1	1206.4	1153.6	1168.4	1329.0	1779.6	1948.4	1866.0
50°	1157.7	1169.3	1209.9	1264.0	1288.7	1272.5	1299.0	1478.3	1918.8	2108.3	2013.6
52.5°	1064.8	1076.6	1127.8	1213.4	1314.5	1365.7	1430.0	1625.3	2053.8	2259.7	2153.2
55°	930.3	942.7	1008.5	1105.5	1265.6	1404.1	1539.2	1772.2	2177.4	2395.9	2279.3
57.5°	747.3	756.4	824.9	960.5	1142.6	1365.9	1619.9	1932.5	2293.8	2529.8	2404.2
60°	487.1	495.2	574.6	725.9	938.8	1238.2	1636.0	2111.3	2448.5	2703.7	2572.5
62.5°	323.9	329.3	376.5	487.5	661.1	992.9	1541.9	2254.1	2675.4	3006.6	2861.3
65°	222.2	227.7	274.8	352.2	427.1	656.8	1271.4	2235.1	2880.9	3247.2	3075.3
67.5°	158.6	163.2	203.2	276.1	309.1	381.5	861.8	1993.5	2851.3	3256.3	3086.8
70°	113.7	116.2	149.2	215.0	245.7	229.2	479.3	1524.7	2496.5	3006.8	2851.8
72.5°	79.5	80.4	103.6	163.8	197.9	167.3	228.2	1016.6	1888.2	2360.1	2210.8
75°	53.9	54.9	69.7	120.1	158.8	127.7	120.8	545.1	1108.4	1306.4	1171.1
77.5°	33.0	33.4	45.0	82.1	118.8	97.4	77.8	230.9	428.9	421.1	359.0
80°	18.7	18.7	28.7	51.0	81.1	62.8	54.5	98.2	135.8	119.3	105.2
82.5°	10.5	10.7	20.8	31.7	53.7	37.1	30.0	45.4	58.6	52.0	45.2
85°	4.3	4.8	12.8	15.0	25.6	18.4	12.2	19.2	21.7	19.4	14.1
87.5°	0.4	0.6	3.9	2.9	3.1	3.7	1.7	3.7	3.1	3.1	2.2
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°	499.9	499.9	499.9	499.9	499.9	499.9	499.9	499.9	499.9	499.9	499.9
2.5°	503.2	499.9	491.7	482.1	469.4	463.4	455.2	449.5	444.7	445.2	440.9
5°	512.9	504.7	486.3	463.2	434.5	414.1	392.4	377.4	365.2	362.6	356.7
7.5°	526.4	513.4	481.0	439.5	391.0	354.3	321.5	300.4	285.5	280.7	275.9
10°	543.8	524.9	474.3	409.8	340.0	293.3	258.1	241.6	231.3	227.9	225.3
12.5°	564.0	538.1	465.4	373.5	287.4	242.4	220.1	211.9	208.6	207.5	206.8
15°	589.4	554.6	451.9	330.5	242.9	211.4	201.8	200.8	201.2	200.8	200.5
17.5°	619.6	572.7	430.0	286.2	212.9	195.6	192.1	192.9	194.0	193.8	193.3
20°	652.6	590.5	401.9	246.8	192.5	184.2	182.2	183.2	184.0	183.6	183.4
22.5°	690.2	609.7	370.8	216.2	178.8	173.8	171.6	171.9	171.9	171.0	170.6
25°	735.2	630.7	338.2	194.4	168.4	164.5	161.8	161.0	159.7	157.0	156.6
27.5°	788.8	653.1	307.0	179.3	160.1	156.4	153.3	151.2	147.9	143.6	143.2
30°	849.3	680.2	280.4	169.6	153.6	150.0	146.5	143.2	138.4	132.9	132.5
32.5°	920.3	709.4	261.2	163.4	147.7	143.8	139.7	135.8	130.6	125.2	125.4
35°	1005.0	744.6	249.9	159.1	143.2	138.0	133.4	129.0	125.2	120.3	119.9
37.5°	1097.0	781.9	246.4	156.8	140.1	132.1	126.9	123.8	123.4	120.5	120.3
40°	1197.5	826.3	249.0	155.6	136.8	126.5	120.8	120.1	121.3	116.2	116.4
42.5°	1304.0	878.8	253.3	154.1	132.3	120.8	115.4	115.4	114.5	107.5	107.5
45°	1419.1	939.4	257.7	150.4	126.9	115.1	111.0	109.5	105.8	99.1	98.8
47.5°	1535.1	1001.1	261.0	143.6	120.3	110.4	106.7	103.2	97.8	91.6	91.4
50°	1645.3	1056.6	257.5	133.7	113.0	105.8	101.9	97.1	91.2	87.1	86.5
52.5°	1743.7	1104.5	242.7	121.9	105.2	101.1	97.6	92.6	87.7	83.4	83.0
55°	1829.3	1143.4	216.6	110.8	98.2	96.9	93.4	87.1	80.6	76.9	76.5
57.5°	1911.4	1173.0	184.0	101.7	91.9	92.4	87.1	81.5	75.4	71.4	71.0
60°	2020.7	1212.6	151.0	93.2	85.2	86.5	80.8	76.7	69.1	64.1	63.4
62.5°	2195.4	1274.0	119.9	82.8	77.4	77.8	75.4	70.4	61.3	55.4	54.9
65°	2334.0	1251.4	94.5	71.4	68.5	69.1	69.1	63.7	53.9	47.2	46.5
67.5°	2318.3	1071.5	75.4	60.4	60.0	60.4	61.9	57.4	47.8	42.3	41.5
70°	2135.7	852.3	60.4	50.2	52.2	51.0	55.4	52.4	43.0	37.6	36.9
72.5°	1742.6	614.0	46.0	41.5	40.0	41.7	50.0	47.2	35.9	29.7	29.1
75°	1018.3	327.6	34.3	32.8	28.9	34.7	44.3	40.2	27.4	21.9	21.3
77.5°	331.6	114.3	25.2	24.1	21.5	28.0	37.8	33.9	22.3	17.4	16.7
80°	88.9	34.5	17.1	15.9	13.9	20.8	30.0	27.0	16.1	11.3	11.1
82.5°	35.7	14.6	10.0	8.9	7.6	14.3	23.7	21.7	12.0	7.2	7.2
85°	11.5	4.8	3.7	2.9	3.5	8.9	14.1	14.8	8.5	3.7	2.9
87.5°	1.5	0.6	0.6	0.8	0.6	1.5	4.3	4.1	2.4	0.4	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)