

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: P959753

Luminaire Tested: **NAV-SB1B-727-U-SL3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959753
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-13)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-727-U-SL3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4312.2 lumens
Efficiency: N/A
Efficacy: 108.3 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

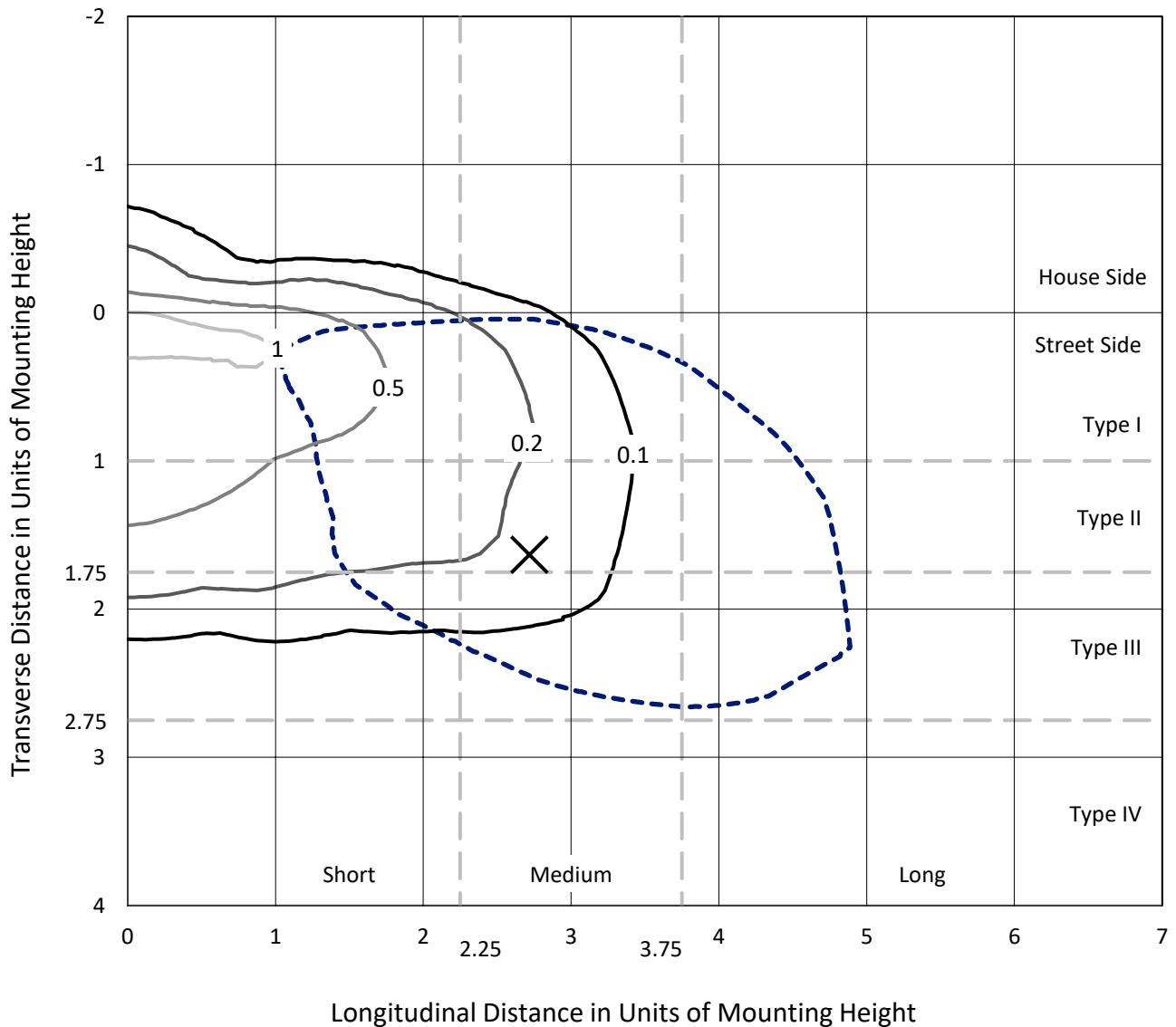
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

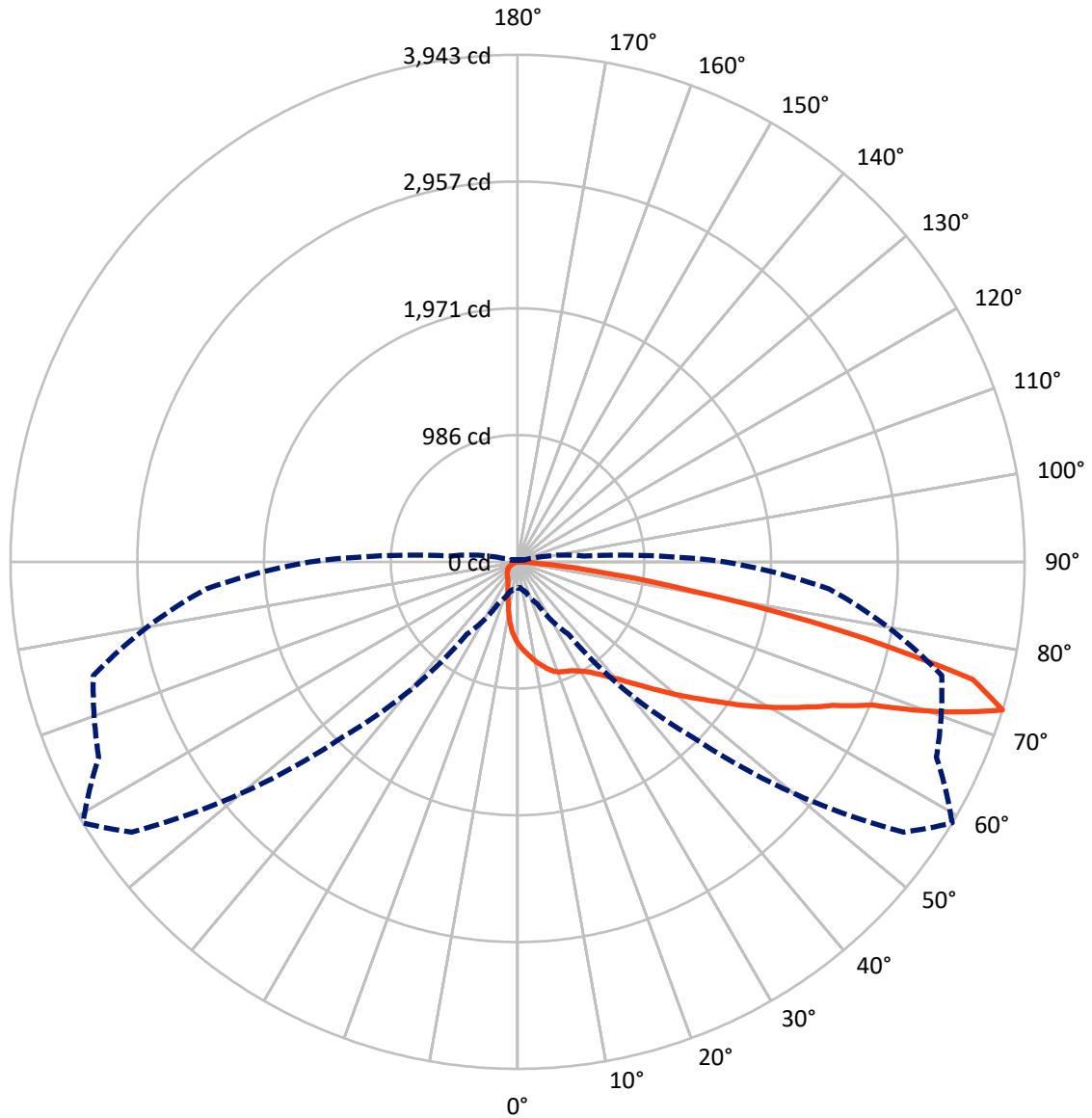
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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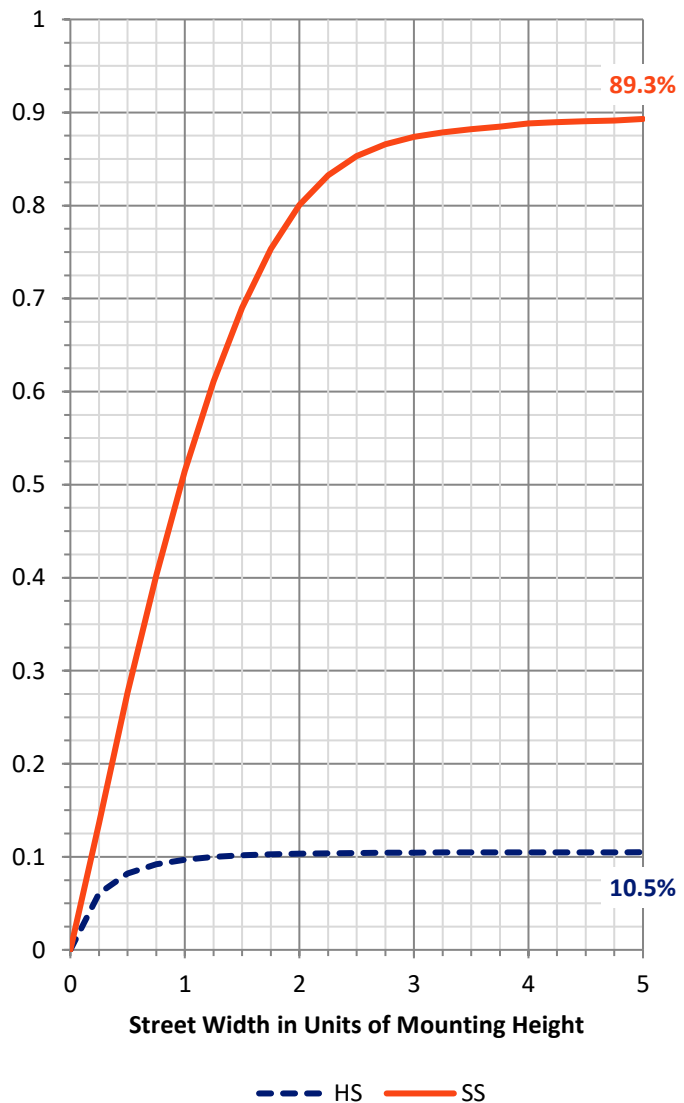
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	455.4	0.0	455.4
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	3856.7	0.0	3856.7
	% Fixture	89.4	0.0	89.4
Total	Lumens	4312.2	0.0	4312.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.7	1.3
10°-20°	153.2	3.6
20°-30°	242.9	5.6
30°-40°	389.7	9.0
40°-50°	622.5	14.4
50°-60°	901.3	20.9
60°-70°	1069.6	24.8
70°-80°	794.0	18.4
80°-90°	81.2	1.9
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°	4312.2	100.0
0°-180°	4312.2	100.0

Coefficient of Utilization

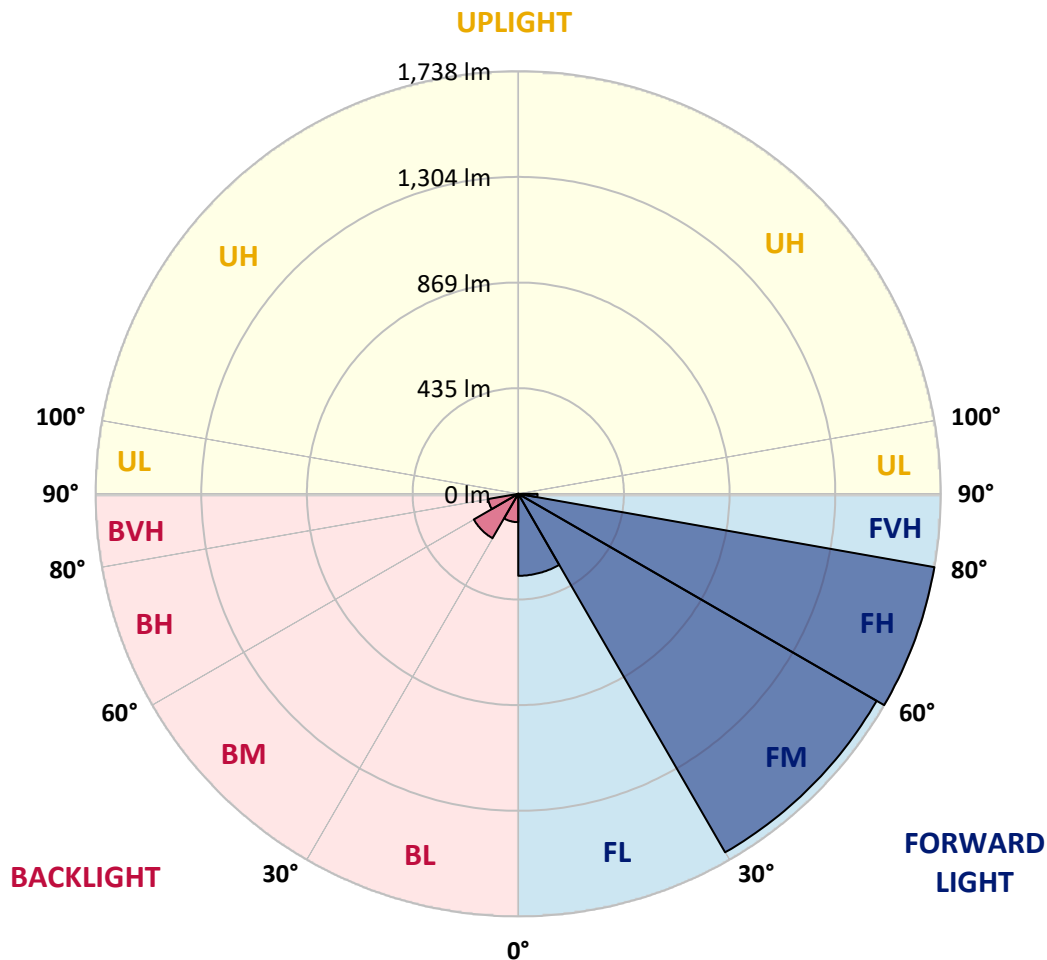


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	337.1	7.8			
FM (30°-60°)	1702.4	39.5			
FH (60°-80°)	1738.1	40.3			G1/1800
FVH (80°-90°)	79.2	1.8			G1/100
BL (0°-30°)	116.7	2.7	B1/500		
BM (30°-60°)	211.2	4.9	B0/220		
BH (60°-80°)	125.6	2.9	B1/500		G1/500
BVH (80°-90°)	2.0	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°	59°	65°	75°	85°
0°	637.7	637.7	637.7	637.7	637.7	637.7	637.7	637.7	637.7	637.7	637.7
2.5°	707.5	703.6	704.1	697.3	692.6	687.5	677.6	676.2	669.2	656.8	644.1
5°	769.2	766.6	764.3	756.8	746.9	734.5	717.9	712.0	699.0	677.6	652.8
7.5°	814.2	811.1	812.2	804.6	796.7	782.9	760.1	749.2	732.0	699.4	661.8
10°	822.9	821.2	828.5	831.4	831.4	822.7	800.4	789.5	764.3	722.7	671.2
12.5°	774.0	774.2	792.5	814.5	843.2	851.4	836.4	824.6	799.8	747.4	683.0
15°	716.8	717.1	734.8	762.9	810.0	857.0	868.8	861.2	835.6	774.2	696.8
17.5°	682.4	681.0	692.8	716.0	765.2	831.4	888.5	893.6	872.8	803.8	712.0
20°	677.6	675.1	681.3	692.8	728.1	799.3	890.7	914.7	911.0	837.3	729.5
22.5°	706.9	702.9	699.6	700.2	715.0	772.5	885.1	926.5	950.5	877.5	753.4
25°	765.0	758.7	747.7	733.7	730.6	766.9	881.2	939.5	987.1	929.1	784.9
27.5°	835.9	827.2	806.1	784.9	766.9	782.7	889.4	960.0	1028.4	989.0	821.5
30°	913.9	903.1	882.0	842.0	813.3	817.8	908.8	987.1	1081.4	1056.9	867.4
32.5°	1028.4	1003.7	966.8	905.7	867.7	855.9	938.1	1021.4	1147.0	1147.3	933.9
35°	1126.7	1112.8	1075.7	999.7	921.8	906.2	976.6	1069.8	1237.9	1266.9	1026.7
37.5°	1191.2	1172.3	1139.6	1082.5	1005.6	958.1	1028.2	1129.2	1334.1	1403.1	1141.3
40°	1263.2	1244.7	1201.3	1147.5	1103.0	1047.0	1093.2	1197.6	1439.7	1543.0	1272.2
42.5°	1350.2	1326.0	1274.8	1216.8	1170.3	1164.1	1178.2	1282.9	1548.2	1695.1	1408.5
45°	1452.4	1429.6	1370.7	1297.5	1256.8	1245.8	1285.1	1382.3	1668.9	1861.8	1546.2
47.5°	1548.2	1521.7	1458.4	1391.6	1346.2	1311.7	1398.9	1499.7	1805.7	2036.1	1676.3
50°	1629.5	1602.5	1544.5	1473.2	1442.6	1397.3	1510.6	1630.7	1941.5	2213.1	1795.1
52.5°	1685.2	1661.3	1593.2	1544.8	1524.0	1501.1	1641.6	1769.5	2076.5	2375.2	1912.4
55°	1672.6	1651.2	1591.2	1587.8	1586.4	1610.4	1798.2	1926.8	2214.2	2528.7	2029.3
57.5°	1632.3	1608.1	1533.2	1584.8	1634.6	1707.8	1967.6	2112.9	2365.2	2673.4	2141.8
60°	1513.8	1505.3	1459.7	1578.8	1654.9	1803.2	2161.3	2299.8	2528.5	2800.7	2241.9
62.5°	1262.9	1270.3	1270.0	1591.2	1691.5	1911.8	2337.3	2489.0	2688.1	2923.1	2330.7
65°	945.7	971.0	1003.4	1479.7	1740.4	2105.9	2547.5	2694.2	2850.2	3065.6	2421.2
67.5°	635.4	655.7	677.6	1214.0	1594.6	2309.6	2897.0	2975.5	3044.5	3223.5	2522.8
70°	363.8	370.2	400.9	758.2	1229.2	2253.4	3465.9	3494.3	3334.2	3418.1	2596.8
72.5°	203.9	201.6	242.1	359.8	687.0	1929.7	3665.3	3942.6	3593.4	3415.0	2431.6
75°	136.2	136.5	166.7	226.9	267.7	1350.7	3158.5	3655.7	3438.1	3028.2	1986.8
77.5°	92.9	96.0	122.5	175.4	123.9	659.1	2089.6	2560.8	2783.5	2338.4	1371.7
80°	40.3	40.6	80.8	125.9	83.6	209.7	1083.3	1371.9	1745.8	1313.0	543.4
82.5°	20.8	23.7	51.6	81.4	52.7	73.5	511.8	599.4	732.6	385.4	111.5
85°	7.3	8.7	31.8	40.0	26.4	26.1	178.2	181.6	155.1	58.0	30.6
87.5°	0.0	1.4	12.4	9.8	3.4	3.1	21.1	17.7	14.0	8.2	10.1
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°	637.7	637.7	637.7	637.7	637.7	637.7	637.7	637.7	637.7	637.7	637.7
2.5°	638.3	630.6	618.3	603.0	585.3	575.7	561.9	553.5	545.9	546.1	552.4
5°	639.1	626.4	594.9	561.4	524.2	496.9	466.5	445.1	428.8	424.9	430.7
7.5°	641.6	620.2	568.7	512.9	451.0	405.1	363.2	336.7	321.7	317.9	321.7
10°	645.0	613.5	539.2	453.9	377.0	321.7	286.9	270.0	263.2	258.2	261.3
12.5°	647.8	606.4	501.9	392.8	311.1	268.0	241.6	227.4	221.6	217.9	219.9
15°	652.6	597.2	461.7	335.9	266.6	231.4	206.3	196.0	194.2	194.9	195.7
17.5°	657.3	588.1	416.7	291.4	233.9	199.4	184.1	182.4	184.7	187.0	187.8
20°	662.8	575.1	371.0	257.9	203.9	177.1	173.1	174.2	175.4	179.4	180.5
22.5°	670.7	558.8	331.1	229.5	178.8	166.4	164.4	165.2	166.2	170.0	171.2
25°	681.8	541.4	298.7	203.3	163.0	157.6	155.7	155.7	156.8	160.5	161.8
27.5°	693.7	516.6	272.5	179.1	153.8	148.1	144.7	144.7	146.2	150.4	152.0
30°	706.9	494.0	251.9	161.0	145.9	138.5	134.0	132.8	134.6	139.9	141.3
32.5°	730.8	479.5	237.3	152.6	138.8	129.8	123.6	120.5	122.2	128.3	130.1
35°	767.2	476.1	227.2	148.3	132.0	121.9	113.2	108.3	109.8	116.2	118.3
37.5°	809.6	483.1	217.3	142.8	125.6	114.3	102.8	96.6	98.8	104.8	106.4
40°	870.7	512.4	209.7	138.5	119.1	105.3	92.4	86.1	89.8	94.9	95.7
42.5°	944.5	564.5	207.8	134.6	111.2	95.7	82.8	78.3	81.1	85.9	86.7
45°	1036.1	630.9	216.8	129.5	102.5	86.4	75.1	72.7	73.5	78.3	80.6
47.5°	1134.3	699.0	241.6	125.0	94.9	78.8	69.3	67.0	66.4	70.9	73.8
50°	1233.7	759.5	270.8	121.7	89.5	72.7	64.8	61.9	60.6	63.3	64.5
52.5°	1331.9	807.7	290.0	116.0	84.2	66.4	60.8	56.6	54.0	55.5	56.6
55°	1431.6	849.9	291.1	107.5	79.1	62.5	56.9	52.1	49.0	49.0	49.5
57.5°	1524.8	887.1	274.5	96.2	72.1	58.8	51.6	47.6	44.2	43.0	43.4
60°	1607.3	914.7	246.9	83.6	65.9	54.0	46.1	43.0	38.8	36.6	36.1
62.5°	1680.7	928.2	209.2	70.6	58.3	48.4	41.1	37.7	32.1	29.3	29.0
65°	1742.9	914.4	169.7	58.5	51.8	42.2	35.2	31.8	25.6	22.2	22.2
67.5°	1804.6	851.4	128.3	49.3	45.0	35.5	29.0	25.9	21.4	18.6	18.6
70°	1812.5	718.7	89.8	41.4	37.4	27.3	23.4	21.4	17.4	15.0	14.7
72.5°	1613.5	517.2	54.6	33.8	29.3	19.5	18.6	16.9	12.9	11.3	11.0
75°	1289.7	317.0	32.1	25.3	19.5	13.8	13.8	12.1	8.7	7.3	7.3
77.5°	891.3	165.8	18.9	16.3	11.6	8.2	9.0	7.3	4.2	3.4	3.4
80°	357.0	63.0	10.1	7.6	5.3	3.7	3.1	1.6	0.8	0.5	0.8
82.5°	71.2	16.6	3.4	1.9	1.9	0.8	0.0	0.0	0.0	0.0	0.0
85°	18.3	3.7	0.8	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.6	0.0	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)