

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: P961408

Luminaire Tested: **NAV-SB2A-735-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961408
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-735-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7027.4 lumens
Efficiency: N/A
Efficacy: 122.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

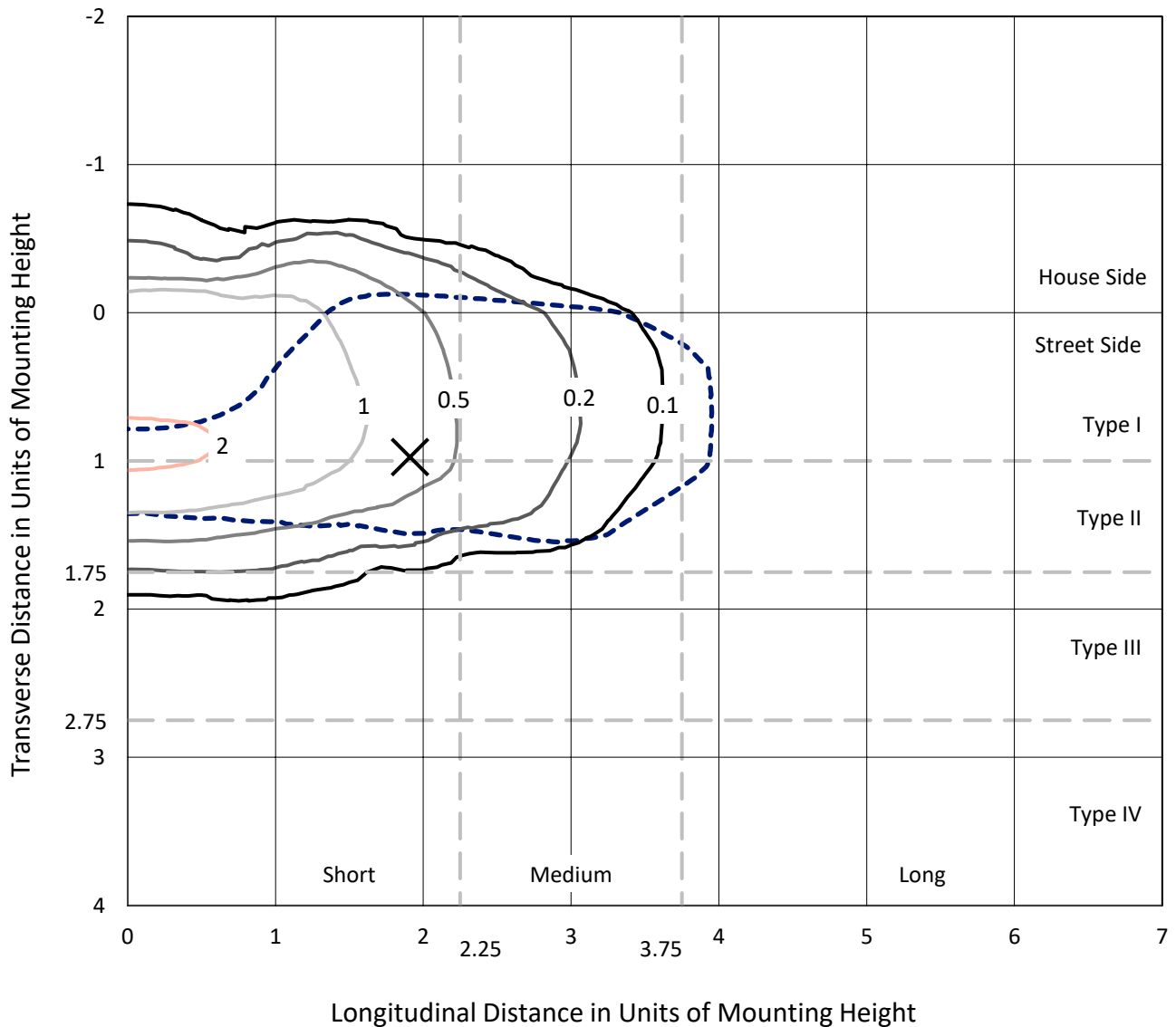
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

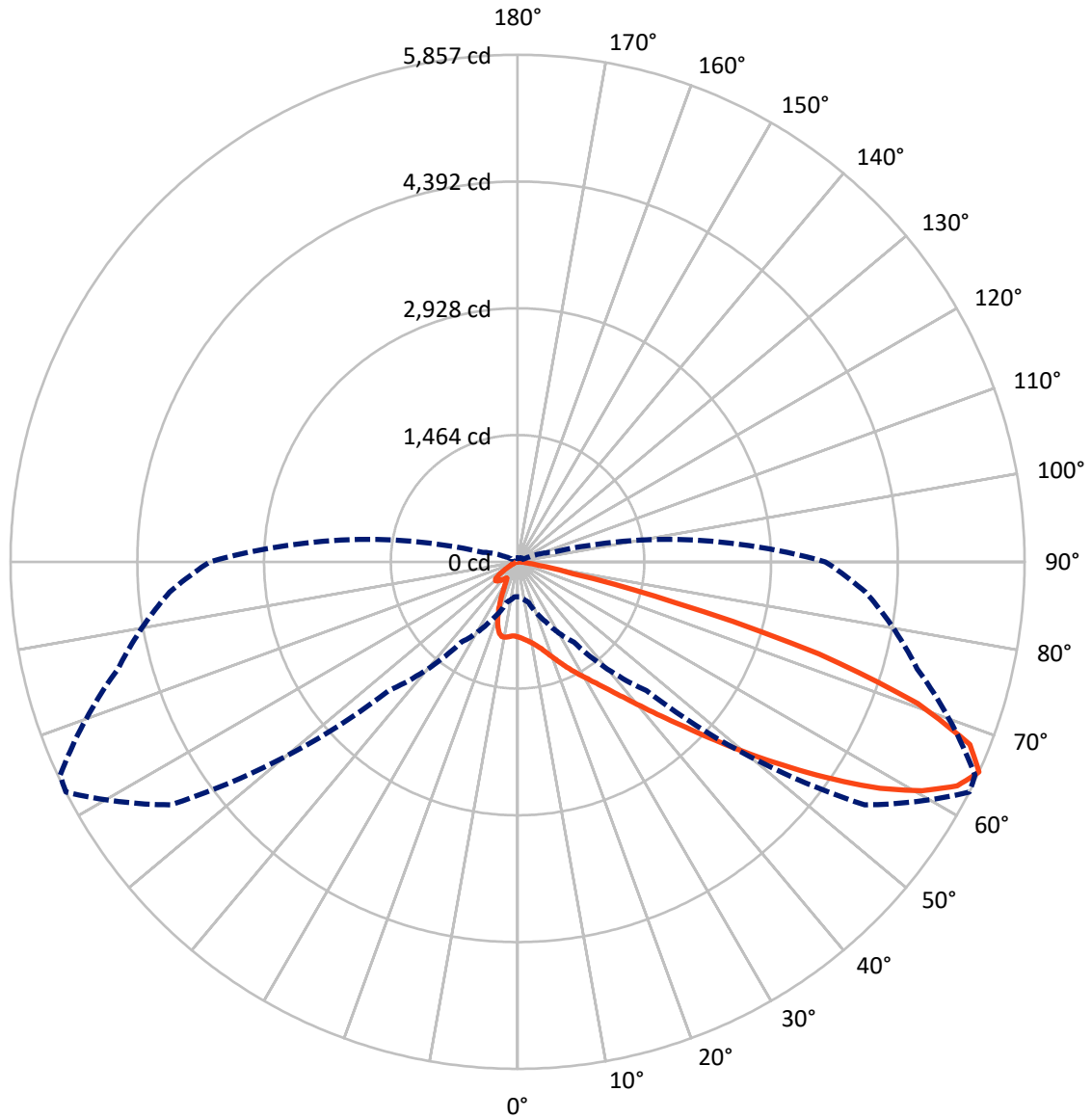
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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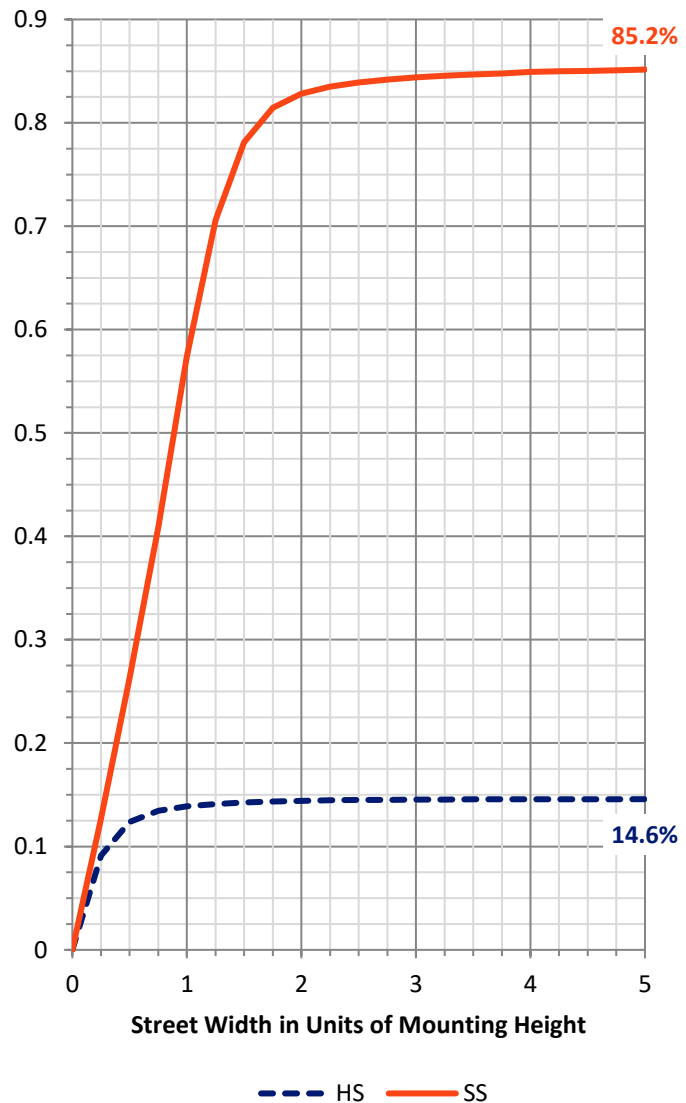
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1033.0	0.0	1033.0
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	5994.4	0.0	5994.4
	% Fixture	85.3	0.0	85.3
Total	Lumens	7027.4	0.0	7027.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	1.2
10°-20°	226.7	3.2
20°-30°	394.8	5.6
30°-40°	711.6	10.1
40°-50°	1411.3	20.1
50°-60°	1922.4	27.4
60°-70°	1534.5	21.8
70°-80°	694.4	9.9
80°-90°	49.9	0.7
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°	7027.4	100.0
0°-180°	7027.4	100.0

Coefficient of Utilization



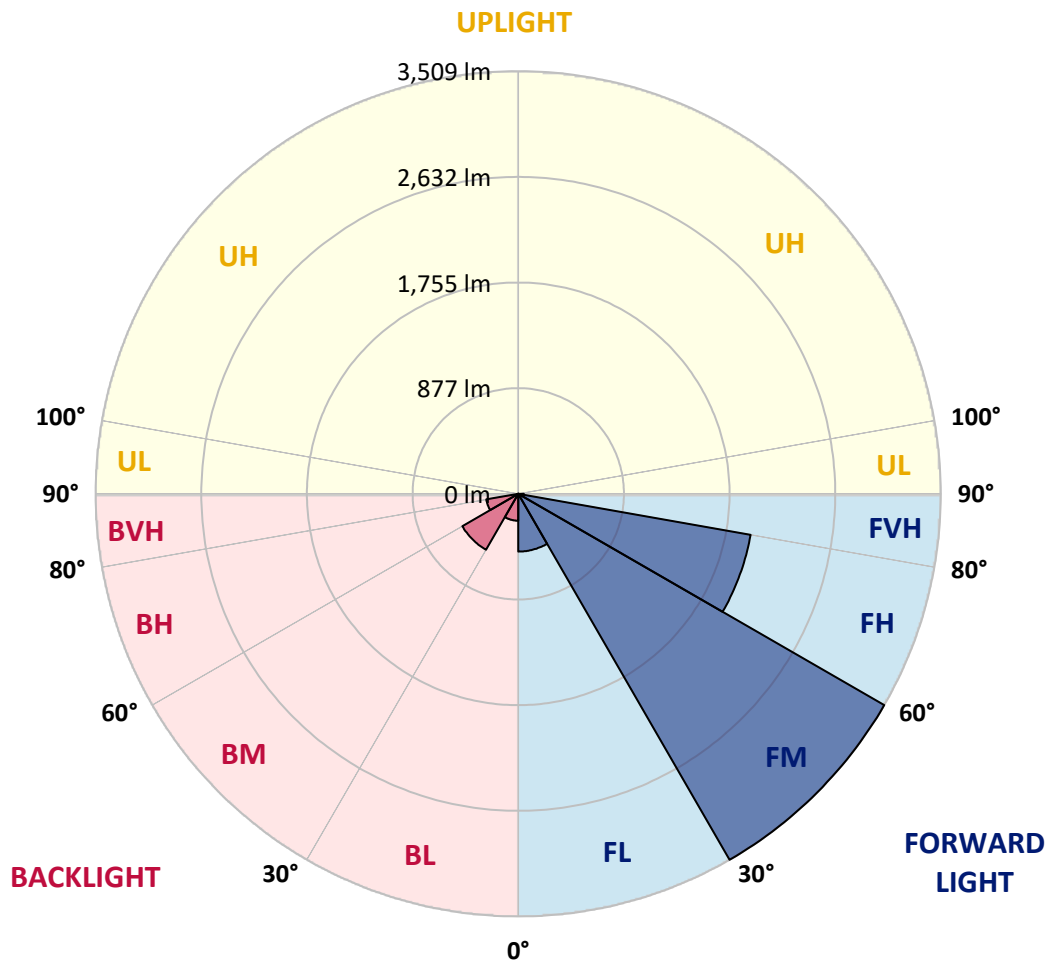
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	479.7	6.8			
FM (30°-60°)	3509.3	49.9			
FH (60°-80°)	1959.2	27.9			G2/5000
FVH (80°-90°)	46.2	0.7			G1/100
BL (0°-30°)	223.6	3.2	B1/500		
BM (30°-60°)	536.1	7.6	B1/1000		
BH (60°-80°)	269.7	3.8	B1/500		G1/500
BVH (80°-90°)	3.7	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	867.4	867.4	867.4	867.4	867.4	867.4	867.4	867.4	867.4	867.4	867.4
2.5°	887.6	885.2	888.6	887.1	886.2	884.3	883.2	882.3	880.4	878.9	873.1
5°	890.0	888.6	892.0	894.8	897.8	900.7	902.1	904.0	902.1	898.2	892.5
7.5°	869.7	868.8	876.0	884.7	897.8	908.9	921.0	927.7	928.2	926.8	920.4
10°	868.3	865.8	873.1	883.8	900.7	920.4	941.8	956.2	958.2	964.5	957.8
12.5°	891.0	888.6	898.7	910.3	927.7	948.5	974.7	995.0	997.8	1006.6	1001.7
15°	929.2	925.8	937.5	952.4	974.7	998.4	1025.9	1044.3	1046.6	1057.3	1048.6
17.5°	973.6	970.3	983.8	999.8	1024.0	1056.4	1088.2	1108.5	1111.4	1118.3	1102.3
20°	1030.7	1026.3	1037.0	1051.5	1077.2	1115.8	1154.0	1183.1	1182.5	1182.5	1156.4
22.5°	1097.0	1090.2	1099.4	1111.0	1135.2	1182.0	1232.8	1267.1	1267.1	1253.6	1210.5
25°	1168.0	1161.2	1171.4	1182.0	1203.4	1256.4	1316.0	1358.5	1360.5	1337.2	1268.5
27.5°	1257.0	1248.2	1256.0	1268.5	1281.1	1335.3	1405.9	1455.2	1456.1	1420.3	1323.7
30°	1428.1	1403.4	1379.2	1365.7	1371.6	1425.3	1500.6	1555.2	1560.2	1510.7	1383.6
32.5°	1741.4	1736.6	1651.5	1540.3	1482.3	1521.9	1606.5	1672.3	1675.2	1611.8	1461.4
35°	2228.2	2222.4	2085.6	1873.9	1684.8	1651.5	1735.1	1812.9	1811.0	1739.4	1562.5
37.5°	2809.3	2804.0	2623.7	2340.4	2034.3	1847.3	1901.0	1982.7	1994.8	1901.0	1693.1
40°	3305.8	3286.0	3172.0	2898.8	2498.4	2172.2	2136.8	2191.0	2203.5	2092.3	1858.8
42.5°	3682.0	3665.1	3607.1	3436.4	3060.2	2652.7	2414.8	2435.6	2449.6	2316.2	2049.4
45°	3876.9	3873.0	3896.1	3880.2	3632.7	3242.5	2812.3	2725.7	2731.0	2564.2	2265.5
47.5°	3904.3	3902.4	4008.3	4158.2	4124.8	3907.7	3322.3	3087.3	3068.4	2844.2	2500.4
50°	3742.0	3738.1	3941.1	4222.0	4453.5	4466.6	3901.5	3494.8	3453.3	3133.7	2745.6
52.5°	3223.2	3222.2	3555.8	4023.3	4569.1	4955.9	4473.9	3942.6	3873.0	3440.2	3004.7
55°	2480.1	2498.0	2880.5	3433.0	4358.3	5191.3	4987.8	4439.6	4332.7	3748.7	3243.5
57.5°	1756.8	1783.0	2161.0	2653.2	3704.7	5052.1	5335.4	4937.5	4822.4	4056.1	3485.7
60°	943.7	966.9	1345.4	1932.8	2756.1	4532.9	5518.6	5369.7	5260.9	4348.2	3704.2
62.5°	562.2	570.0	726.6	1247.8	1864.2	3463.0	5440.8	5698.9	5609.5	4593.3	3894.2
65°	403.6	405.2	483.9	761.9	1131.8	2104.0	4895.0	5856.5	5829.0	4777.9	4034.9
67.5°	339.9	338.9	371.8	506.1	771.1	1053.9	3751.6	5633.7	5750.7	4895.0	4114.7
70°	291.5	292.9	331.7	370.8	579.6	596.6	1865.2	4905.1	5154.6	4925.9	4109.8
72.5°	217.1	221.9	257.7	337.9	437.6	410.4	644.0	3637.0	4088.1	4641.1	3896.6
75°	153.2	155.7	181.3	284.2	326.4	298.8	328.7	1880.2	2458.4	3558.2	3189.3
77.5°	118.0	122.3	137.4	198.7	321.5	209.8	201.1	650.8	999.8	2149.4	2186.6
80°	63.9	71.5	99.1	143.6	225.8	148.4	99.6	259.1	338.9	1005.1	843.2
82.5°	32.9	36.7	69.1	103.4	128.6	129.6	49.3	107.8	139.7	310.4	115.5
85°	13.0	16.0	46.4	57.1	66.2	63.9	22.2	43.5	50.3	86.1	35.3
87.5°	2.9	4.8	16.9	13.0	12.6	13.5	5.3	10.1	9.6	10.1	6.3
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°	867.4	867.4	867.4	867.4	867.4	867.4	867.4	867.4	867.4	867.4	867.4
2.5°	872.6	870.7	865.4	859.6	852.8	848.9	846.5	846.0	842.7	840.2	842.7
5°	887.1	885.2	875.0	862.9	849.9	839.8	830.0	821.4	808.8	806.4	805.4
7.5°	916.1	910.8	894.4	877.9	853.3	823.8	788.0	746.9	710.2	699.0	693.7
10°	951.9	944.6	923.8	894.8	840.2	760.0	673.4	593.2	529.4	511.5	504.7
12.5°	992.5	986.3	958.7	905.0	785.6	640.1	507.6	408.1	346.1	330.7	326.4
15°	1040.9	1031.7	993.5	889.6	688.0	486.4	348.6	289.6	267.3	264.4	261.6
17.5°	1092.1	1077.2	1024.4	833.9	556.5	345.6	269.3	252.4	242.7	239.7	238.3
20°	1139.0	1119.7	1042.8	749.8	415.7	269.3	241.3	230.1	221.4	218.0	216.1
22.5°	1185.9	1158.4	1042.8	635.3	311.8	238.8	221.4	211.3	201.1	196.8	194.3
25°	1234.7	1198.0	1024.4	507.6	250.9	219.0	202.5	191.5	182.8	177.4	175.5
27.5°	1282.1	1231.3	982.4	386.7	223.3	201.6	185.1	174.6	166.4	162.5	162.5
30°	1327.1	1264.2	923.4	293.5	205.5	184.7	169.2	160.0	151.8	147.9	148.4
32.5°	1388.0	1305.8	860.6	240.8	190.0	168.7	154.7	146.0	138.8	135.8	135.8
35°	1472.6	1367.2	806.4	236.4	176.9	155.7	141.7	133.5	126.2	123.7	123.7
37.5°	1592.5	1466.3	777.9	265.4	166.4	144.1	131.0	122.3	115.5	113.6	113.2
40°	1740.4	1600.7	793.3	294.4	159.1	134.0	121.4	112.6	106.8	104.4	103.9
42.5°	1915.9	1766.5	878.9	316.6	154.3	125.3	112.1	102.5	98.6	97.7	97.7
45°	2117.5	1948.8	1009.9	340.3	146.5	117.0	103.0	95.7	92.9	92.4	91.8
47.5°	2346.6	2148.9	1161.7	369.8	138.8	109.3	95.7	90.9	88.5	87.5	87.5
50°	2573.9	2350.5	1317.8	386.3	132.4	102.0	89.9	86.1	84.2	83.6	83.6
52.5°	2811.8	2558.0	1444.1	370.8	127.1	96.2	85.1	82.2	80.3	79.7	79.7
55°	3038.5	2725.7	1465.9	314.8	116.5	90.4	79.7	78.3	76.0	76.0	75.4
57.5°	3233.8	2809.8	1312.1	231.1	105.9	81.7	74.4	73.0	71.0	70.6	70.1
60°	3413.1	2785.6	1012.8	155.7	94.3	73.0	67.6	66.7	64.8	62.3	61.9
62.5°	3514.2	2679.2	692.8	101.5	82.7	63.9	60.0	59.4	55.1	50.3	49.3
65°	3552.4	2460.8	432.2	74.0	69.1	54.6	51.8	50.7	44.5	39.2	38.6
67.5°	3519.0	2101.0	218.0	58.5	54.6	45.4	42.5	42.5	38.2	33.3	32.9
70°	3385.6	1575.1	91.8	46.9	42.0	34.8	34.8	36.7	32.4	27.1	26.5
72.5°	3096.0	1059.7	48.8	35.8	31.5	24.7	28.5	29.9	25.6	20.3	20.3
75°	2461.2	646.4	33.8	26.5	19.8	17.4	21.7	22.8	17.4	13.5	13.0
77.5°	1683.4	371.3	22.8	16.9	12.6	10.1	15.0	14.0	9.2	6.3	6.8
80°	739.2	154.7	13.0	7.7	4.8	3.9	5.3	3.9	2.9	1.9	1.9
82.5°	86.5	36.3	4.8	2.9	1.9	0.9	0.5	0.0	0.0	0.0	0.0
85°	17.9	4.3	2.5	0.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.4	0.9	0.5	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)