

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: P963514

Luminaire Tested: **NAV-SB3A-735-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963514
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-735-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11679.9 lumens
Efficiency: N/A
Efficacy: 137.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

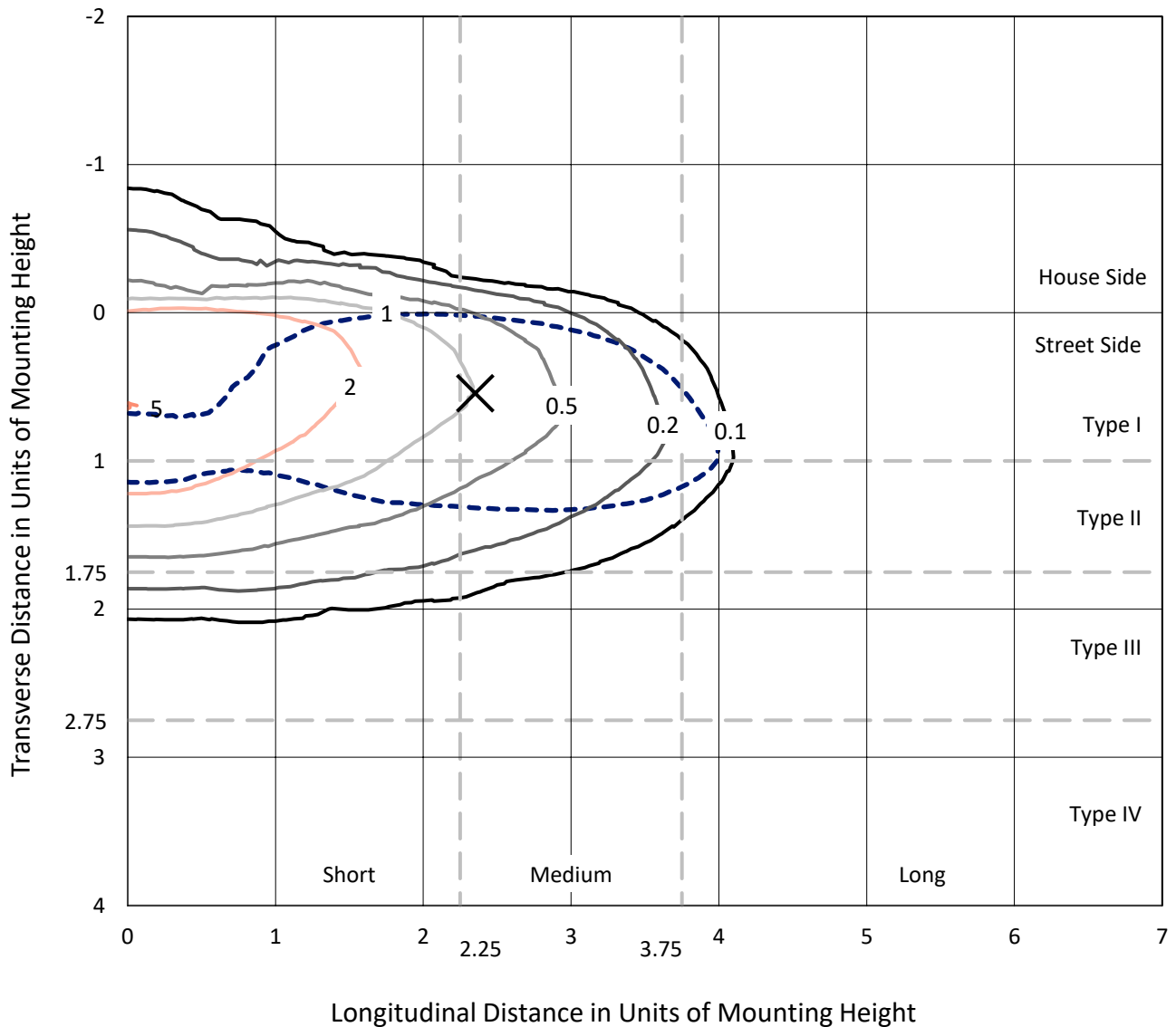
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

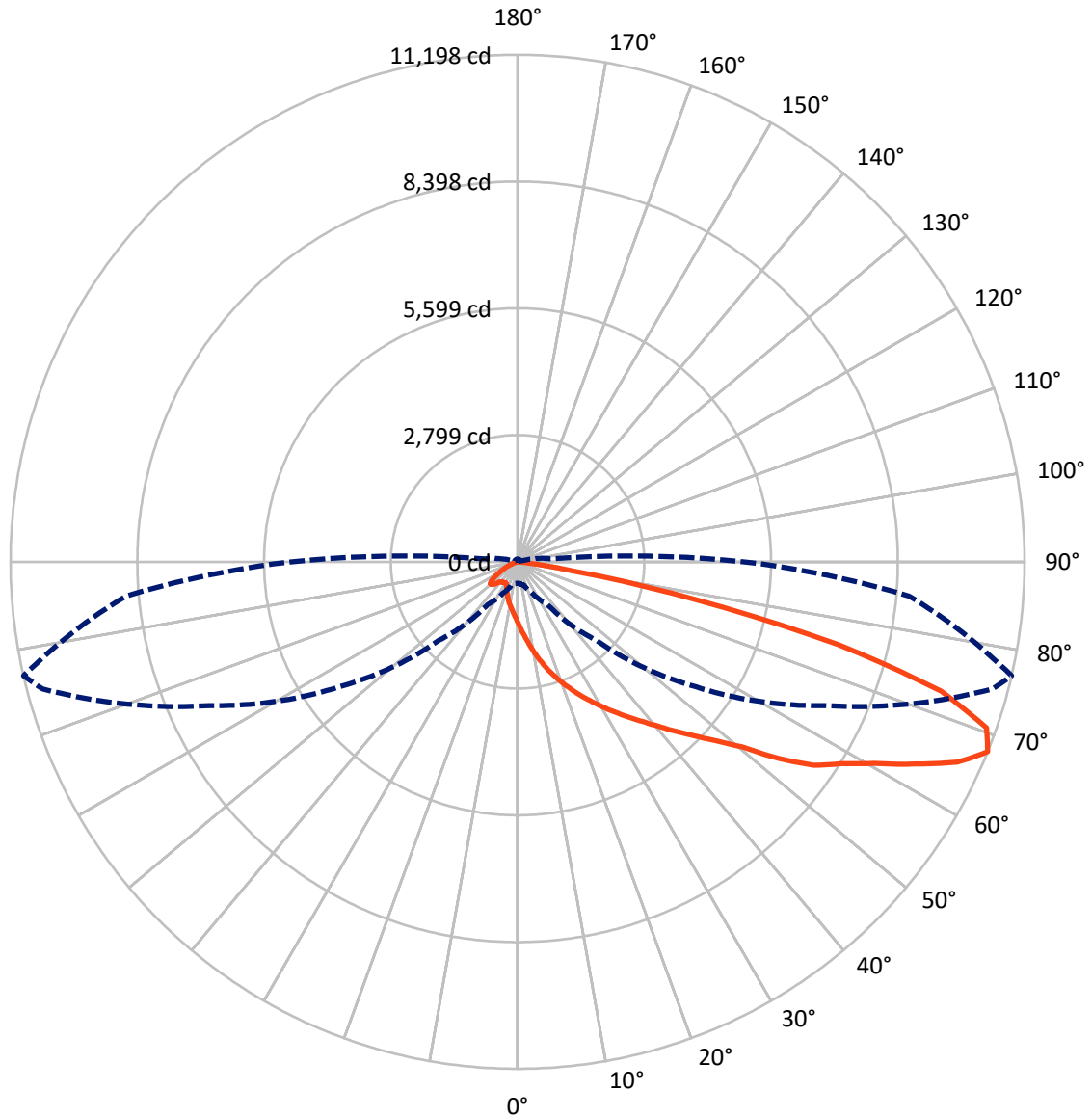
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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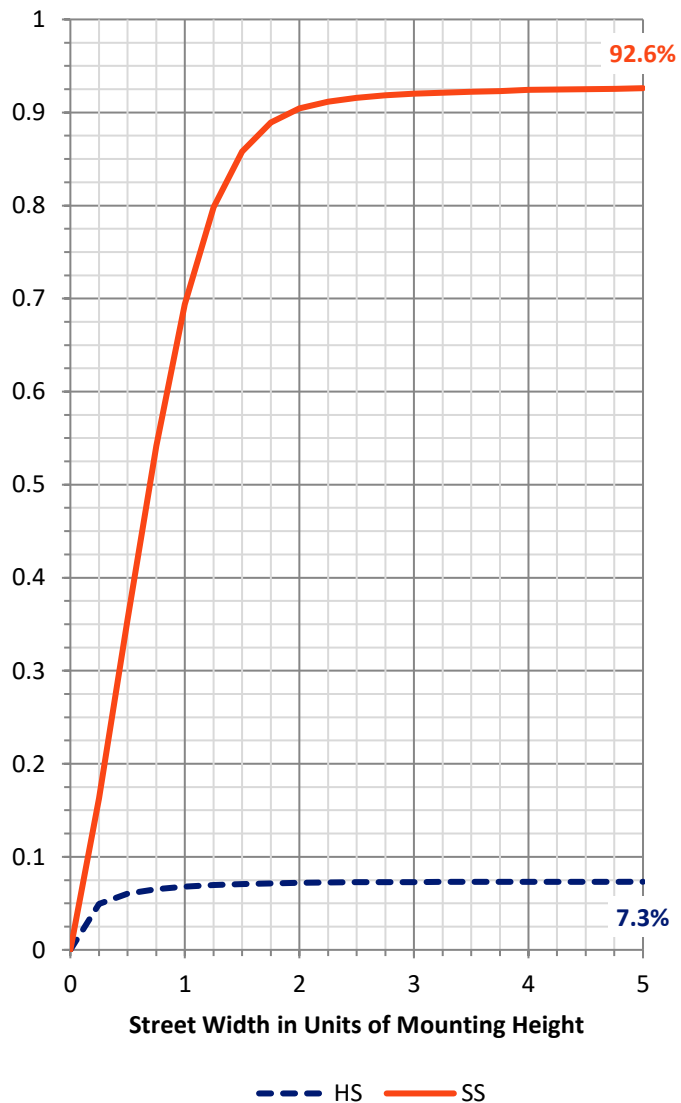
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	859.3	0.0	859.3
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	10820.6	0.0	10820.6
	% Fixture	92.6	0.0	92.6
Total	Lumens	11679.9	0.0	11679.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.5	1.2
10°-20°	481.4	4.1
20°-30°	929.0	8.0
30°-40°	1612.8	13.8
40°-50°	2341.6	20.0
50°-60°	2689.1	23.0
60°-70°	2334.6	20.0
70°-80°	1099.6	9.4
80°-90°	54.4	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°	11679.9	100.0
0°-180°	11679.9	100.0

Coefficient of Utilization

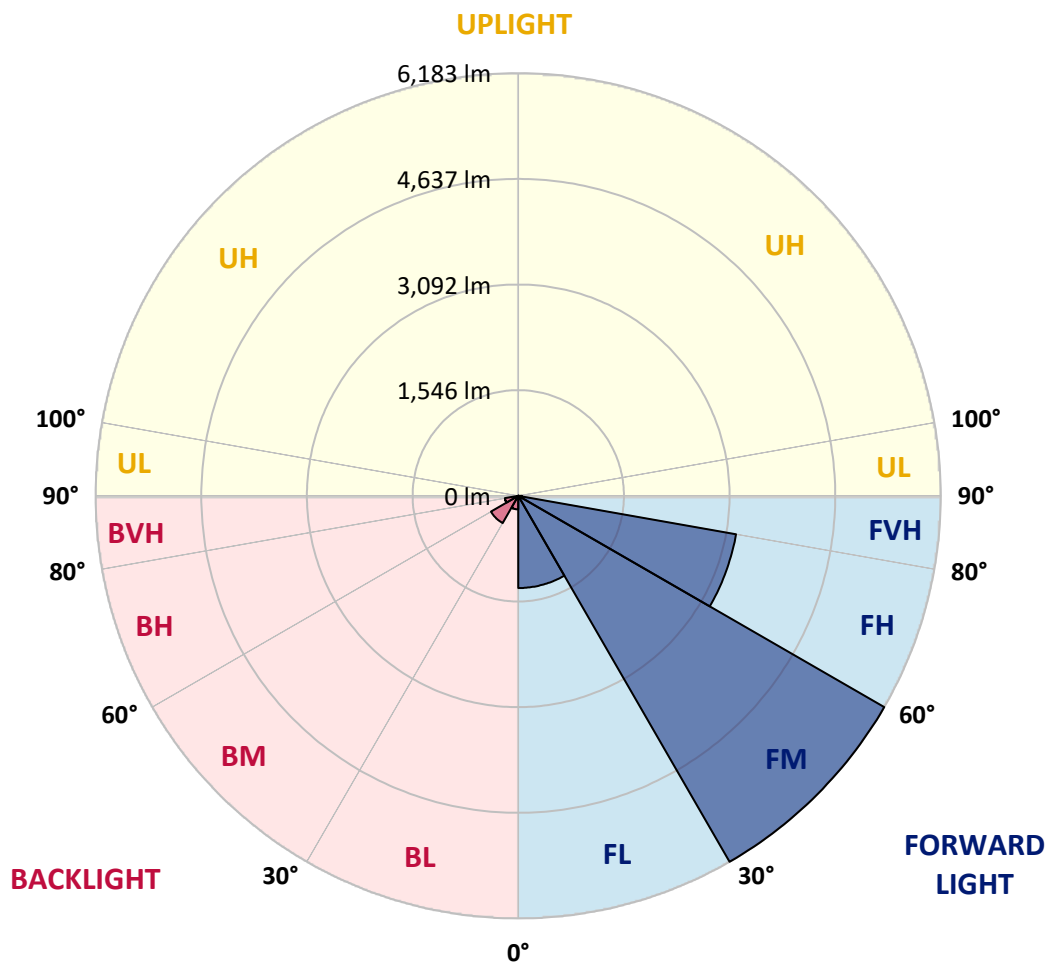


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1348.9	11.5			
FM (30°-60°)	6183.0	52.9			
FH (60°-80°)	3235.3	27.7			G2/5000
FVH (80°-90°)	53.4	0.5			G1/100
BL (0°-30°)	198.9	1.7	B1/500		
BM (30°-60°)	460.4	3.9	B1/1000		
BH (60°-80°)	198.9	1.7	B1/500		G1/500
BVH (80°-90°)	1.0	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-G2
 Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8
2.5°	1864.7	1876.4	1859.7	1827.7	1779.8	1748.6	1672.5	1600.7	1520.9	1495.6	1415.7
5°	2273.0	2283.2	2264.3	2229.6	2165.7	2104.8	2004.7	1854.5	1698.6	1648.6	1507.2
7.5°	2575.5	2581.3	2574.1	2542.1	2481.2	2412.3	2300.6	2122.9	1891.5	1836.4	1619.6
10°	2793.1	2812.0	2809.7	2797.4	2756.8	2701.0	2582.1	2379.6	2107.7	2036.6	1746.5
12.5°	2937.4	2958.5	2970.8	2998.3	2996.2	2960.6	2856.2	2642.2	2323.1	2239.7	1889.4
15°	2979.5	3002.0	3049.1	3112.9	3169.5	3187.6	3114.4	2899.7	2560.2	2453.6	2035.9
17.5°	2955.6	2990.3	3046.9	3147.8	3271.8	3353.7	3345.8	3148.5	2775.7	2653.8	2179.5
20°	3008.5	3041.9	3086.1	3170.9	3315.3	3464.0	3523.4	3386.4	2989.6	2862.0	2330.3
22.5°	3301.5	3295.7	3300.1	3313.8	3400.1	3547.4	3670.0	3602.5	3201.4	3070.9	2489.9
25°	3765.7	3739.6	3695.3	3620.6	3598.9	3670.0	3797.6	3793.9	3424.8	3284.8	2653.1
27.5°	4298.0	4293.7	4190.0	4010.1	3908.6	3881.1	3941.9	3980.4	3646.0	3496.6	2817.0
30°	4808.0	4819.5	4679.5	4479.4	4293.0	4184.9	4129.8	4157.4	3870.9	3725.1	2986.0
32.5°	5251.8	5264.2	5111.9	4877.6	4646.9	4516.4	4400.3	4332.2	4116.0	3957.2	3171.7
35°	5626.8	5639.1	5464.3	5205.4	4959.6	4841.3	4710.0	4523.6	4362.6	4214.7	3378.4
37.5°	5961.9	5958.2	5724.0	5462.8	5221.3	5127.8	5058.9	4759.4	4616.5	4473.6	3607.6
40°	6159.8	6175.1	5974.9	5687.0	5452.7	5384.5	5380.2	5051.6	4909.4	4771.0	3858.5
42.5°	6217.9	6244.7	6099.7	5863.2	5650.7	5576.7	5690.6	5367.8	5250.4	5115.5	4142.1
45°	6113.5	6139.5	6073.5	5909.6	5785.6	5737.7	5957.5	5695.7	5614.4	5481.0	4461.9
47.5°	5808.9	5841.5	5857.5	5822.6	5821.2	5869.8	6196.8	6040.9	6046.8	5910.4	4832.6
50°	5219.2	5274.3	5420.8	5544.1	5734.9	5974.2	6429.7	6415.2	6534.2	6416.6	5315.6
52.5°	4147.3	4225.6	4730.4	5067.6	5496.3	5954.6	6685.7	7015.7	7389.2	7217.3	5996.7
55°	3332.7	3332.7	3743.2	4374.2	5030.6	5825.5	6797.4	7405.9	7971.6	7931.0	6476.1
57.5°	2717.0	2749.6	3011.4	3569.2	4356.8	5518.0	6866.3	7651.1	8440.9	8411.2	6944.7
60°	1676.9	1747.2	2241.9	2792.4	3590.2	4970.4	6822.8	7899.2	9010.3	9034.2	7508.9
62.5°	944.3	970.5	1190.9	2009.0	2791.6	4234.3	6489.9	8037.6	9738.4	9840.0	8090.6
65°	652.0	665.1	750.0	1250.4	1935.1	3371.1	5839.3	7951.3	10468.1	10673.3	8583.8
67.5°	473.7	480.1	533.1	763.7	1148.1	2444.2	4819.5	7516.1	10854.6	11197.7	8678.1
70°	364.1	368.5	406.9	501.9	678.1	1508.6	3500.3	6650.9	10574.7	10984.5	8195.1
72.5°	295.9	300.2	330.0	371.4	449.7	892.1	2121.4	5401.2	9338.8	9781.3	6976.6
75°	249.5	255.3	282.2	308.9	352.5	573.0	995.1	3761.3	7023.0	7313.1	4851.4
77.5°	138.6	127.6	229.2	256.0	297.4	362.6	465.7	2213.6	3933.2	4013.8	2152.7
80°	86.3	89.2	182.0	206.0	228.5	182.8	213.2	852.2	1363.6	1295.4	417.1
82.5°	5.1	11.6	140.0	148.7	156.6	78.3	80.5	289.4	328.5	301.8	74.0
85°	0.0	0.0	63.9	51.5	54.4	22.4	23.2	67.4	44.3	47.9	14.6
87.5°	0.0	0.0	0.0	1.4	0.0	2.2	4.3	5.8	2.2	2.9	5.1
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°	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8
2.5°	1365.0	1314.3	1211.2	1110.4	1028.5	952.3	897.9	846.4	820.3	818.9	817.4
5°	1406.3	1299.7	1093.8	911.7	765.2	647.7	571.5	517.1	489.5	480.1	478.7
7.5°	1464.3	1304.1	990.8	737.6	565.0	464.2	420.7	403.2	397.5	390.9	389.5
10°	1537.6	1314.3	898.6	594.0	445.4	394.5	377.2	369.9	365.5	361.2	359.8
12.5°	1619.6	1323.7	807.3	493.2	391.7	365.5	353.2	344.5	338.7	333.6	332.2
15°	1699.3	1329.4	712.3	422.8	364.1	343.1	330.0	320.6	312.6	306.8	306.1
17.5°	1778.4	1337.4	623.0	380.8	341.6	320.6	307.5	295.9	289.4	282.9	282.2
20°	1866.2	1336.0	538.8	351.1	319.1	298.1	284.3	273.5	266.9	259.6	258.9
22.5°	1947.4	1328.7	464.9	325.6	295.9	275.6	260.3	249.5	242.9	237.2	236.5
25°	2041.0	1323.0	403.2	302.5	274.2	253.9	237.2	227.0	219.8	214.6	213.9
27.5°	2130.9	1314.3	358.3	281.4	253.2	233.5	217.6	206.0	199.5	195.9	195.9
30°	2219.4	1312.0	341.6	261.1	234.3	214.6	198.7	187.9	182.8	181.3	180.6
32.5°	2326.0	1317.8	348.9	253.9	216.9	197.3	182.0	174.0	169.0	169.0	169.0
35°	2439.9	1316.4	359.8	260.3	205.3	179.9	168.3	163.2	158.2	158.2	158.2
37.5°	2582.8	1318.6	368.5	271.2	200.9	165.3	158.9	152.3	149.4	149.4	149.4
40°	2796.0	1390.4	364.1	280.6	199.5	155.2	142.2	140.0	137.8	137.8	137.8
42.5°	3057.1	1546.3	369.9	281.4	198.7	148.0	130.6	134.9	129.9	129.1	128.3
45°	3342.8	1716.8	406.9	266.2	198.0	144.3	124.7	129.9	121.9	121.9	121.9
47.5°	3626.4	1885.8	444.6	244.5	195.9	143.6	119.7	116.7	114.6	115.3	115.3
50°	4017.4	2023.6	459.1	214.6	190.8	142.2	110.3	111.0	109.5	111.0	111.0
52.5°	4443.2	2052.6	441.7	181.3	176.2	137.8	103.7	106.6	105.9	107.3	107.3
55°	4708.5	2021.4	364.8	150.9	153.8	120.4	97.2	103.0	103.0	103.0	103.0
57.5°	4982.7	1888.7	258.9	122.6	127.6	98.6	91.4	99.3	98.6	97.9	97.9
60°	5180.0	1673.9	170.5	100.9	101.6	81.3	84.9	93.6	92.9	89.2	89.2
62.5°	5327.2	1436.8	109.5	85.6	77.6	73.3	77.6	84.9	82.0	74.0	72.6
65°	5310.5	1108.2	84.2	73.3	63.9	63.9	67.4	74.0	65.3	52.2	50.7
67.5°	5000.9	750.0	69.6	61.6	53.7	53.0	55.9	61.6	55.9	44.3	42.7
70°	4447.5	490.3	55.9	47.9	42.7	39.2	45.0	53.0	47.2	35.6	34.1
72.5°	3609.7	298.8	42.0	34.8	31.2	25.4	35.6	43.6	37.7	26.1	24.7
75°	2335.5	152.3	29.0	22.4	16.7	15.3	26.1	32.6	26.1	16.0	13.7
77.5°	893.6	63.9	16.0	10.1	8.7	7.3	14.6	19.6	10.9	3.6	2.9
80°	171.9	26.9	8.0	5.1	4.3	2.9	2.2	1.4	0.0	0.0	0.0
82.5°	29.7	8.7	2.9	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.6	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)