

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: P963437

Luminaire Tested: **NAV-SB3A-727-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963437
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-727-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10910.1 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

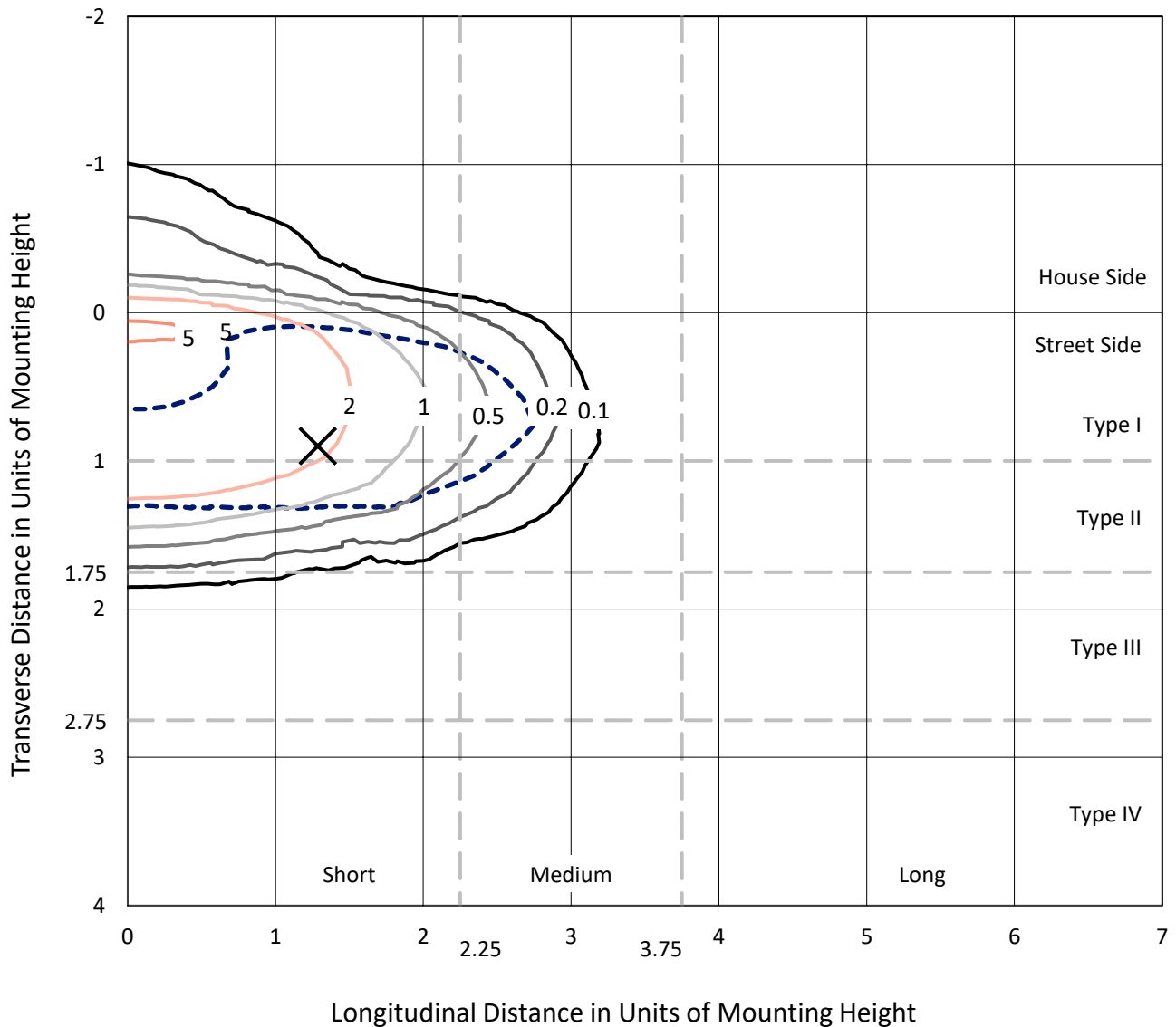
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

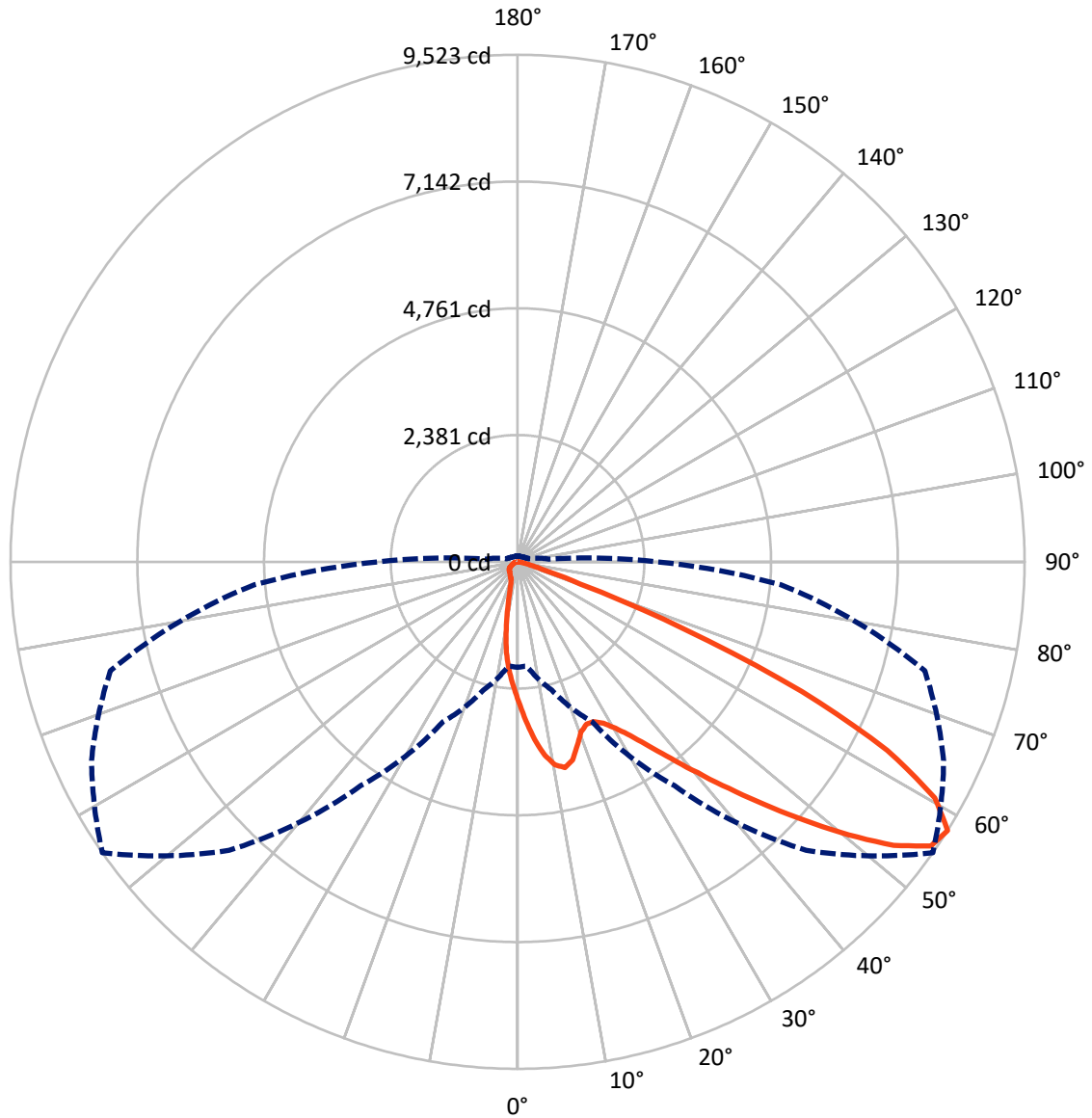
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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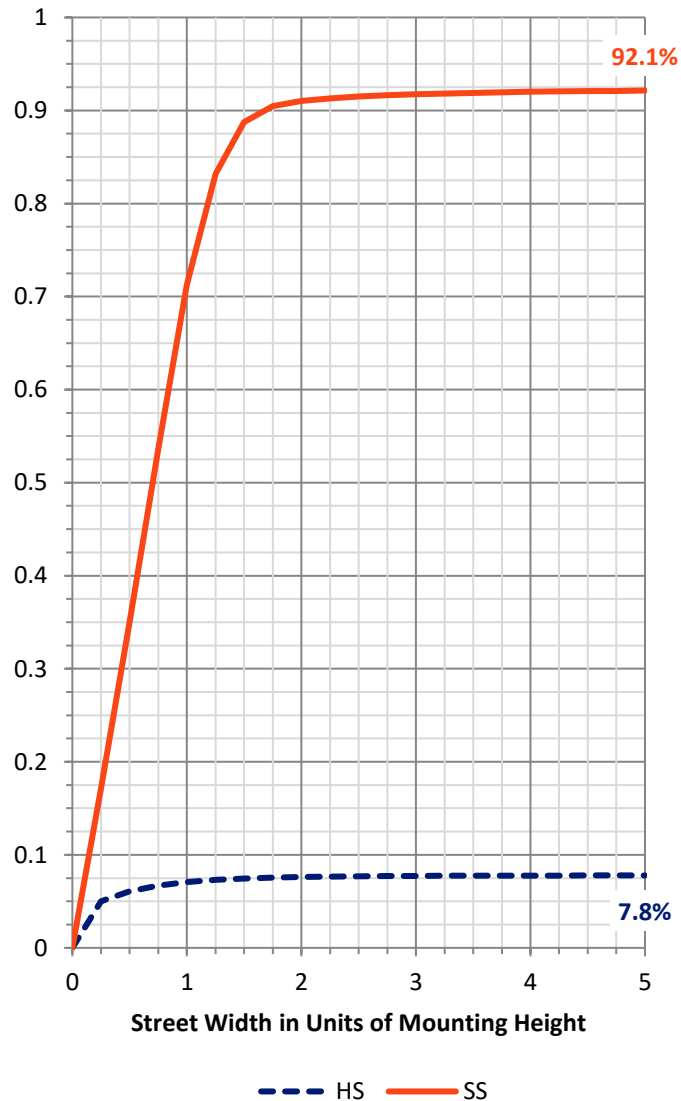
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	852.0	0.0	852.0
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	10058.1	0.0	10058.1
	% Fixture	92.2	0.0	92.2
Total	Lumens	10910.1	0.0	10910.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	244.6	2.2
10°-20°	590.9	5.4
20°-30°	945.4	8.7
30°-40°	1600.2	14.7
40°-50°	2627.1	24.1
50°-60°	2887.4	26.5
60°-70°	1656.2	15.2
70°-80°	338.4	3.1
80°-90°	20.0	0.2
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°	10910.1	100.0
0°-180°	10910.1	100.0

Coefficient of Utilization

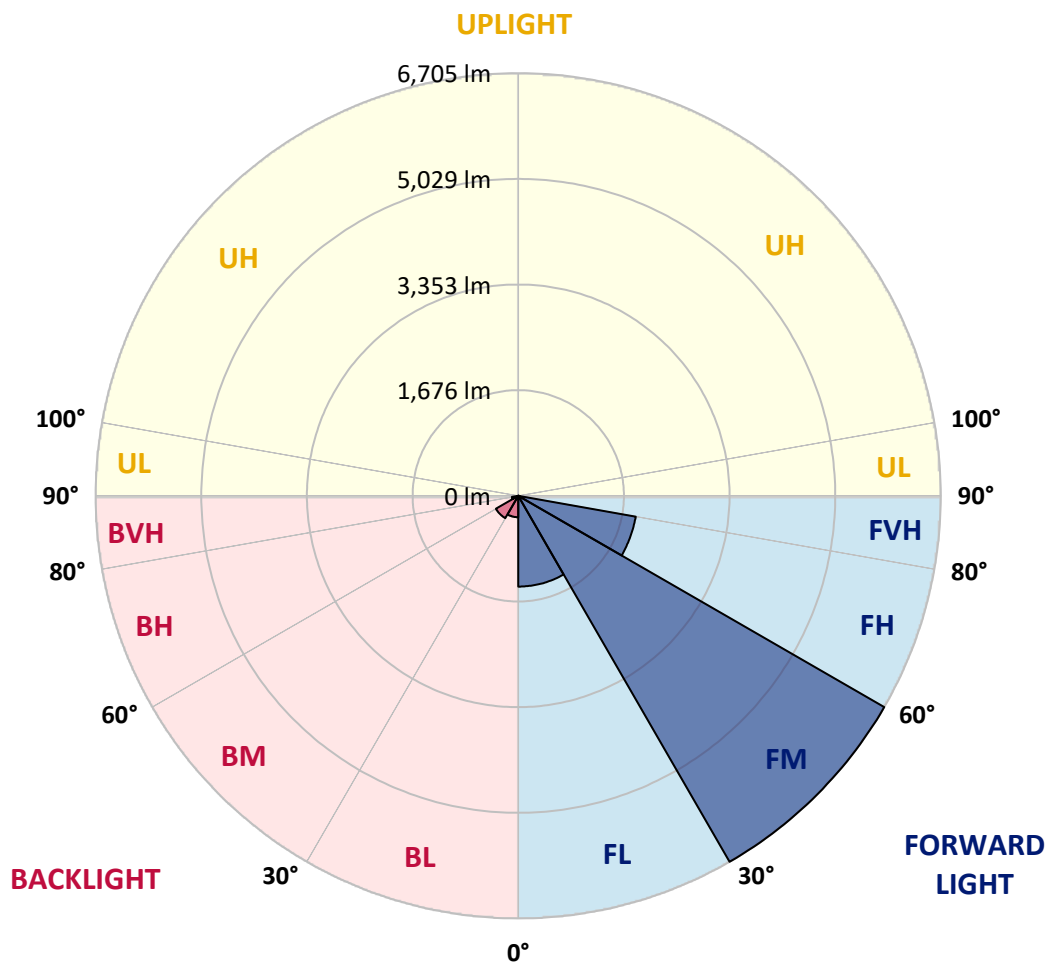


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1440.7	13.2			
FM (30°-60°)	6705.4	61.5			
FH (60°-80°)	1893.3	17.4			G2/5000
FVH (80°-90°)	18.6	0.2			G1/100
BL (0°-30°)	340.2	3.1	B1/500		
BM (30°-60°)	409.2	3.8	B1/1000		
BH (60°-80°)	101.3	0.9	B0/110		G0/110
BVH (80°-90°)	1.3	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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2629.0	2629.0	2629.0	2629.0	2629.0	2629.0	2629.0	2629.0	2629.0	2629.0	2629.0
2.5°	3262.1	3221.1	3215.0	3206.9	3128.9	3070.4	2985.6	2892.8	2788.5	2682.2	2635.1
5°	3768.7	3736.4	3730.4	3692.7	3603.9	3504.3	3353.6	3163.3	2968.8	2740.0	2641.8
7.5°	3866.9	3860.9	3888.4	3887.1	3875.0	3796.3	3669.1	3442.4	3150.4	2811.4	2659.4
10°	3428.9	3444.4	3526.5	3598.5	3792.9	3906.0	3878.3	3691.3	3337.5	2892.8	2678.8
12.5°	3030.0	3011.9	3070.4	3151.8	3377.8	3714.2	3965.1	3899.2	3551.4	2984.9	2707.7
15°	2779.8	2772.3	2805.3	2843.0	3015.2	3354.3	3864.2	4068.0	3757.2	3094.0	2751.5
17.5°	2699.7	2693.6	2703.7	2713.2	2824.8	3087.2	3624.1	4171.6	3954.3	3218.4	2799.9
20°	2764.9	2756.8	2755.5	2748.1	2794.6	2973.5	3406.8	4179.0	4131.3	3331.5	2841.6
22.5°	2955.4	2946.0	2912.9	2883.3	2887.4	2989.0	3309.8	4105.0	4264.5	3437.0	2867.8
25°	3300.5	3285.0	3216.3	3116.8	3053.6	3096.6	3324.7	4007.5	4391.6	3519.7	2855.1
27.5°	3732.3	3712.1	3624.1	3476.1	3331.5	3279.0	3431.6	3940.2	4497.3	3583.0	2827.6
30°	4155.6	4129.3	4042.5	3927.5	3716.2	3550.7	3624.7	3969.8	4623.1	3648.9	2791.2
32.5°	4612.3	4587.4	4472.4	4329.7	4154.8	3932.2	3889.1	4114.5	4777.1	3741.1	2765.7
35°	5190.2	5151.1	4987.6	4793.3	4607.6	4382.2	4247.0	4364.0	4982.3	3881.7	2779.8
37.5°	5848.1	5795.7	5619.4	5351.0	5108.8	4856.6	4682.9	4707.1	5283.1	4070.1	2823.5
40°	6468.4	6420.6	6257.8	6004.9	5700.7	5394.7	5209.7	5155.9	5698.1	4299.5	2900.1
42.5°	6840.4	6797.4	6728.7	6621.8	6365.5	6053.3	5819.8	5703.5	6189.2	4574.0	2993.7
45°	6861.2	6823.6	6915.8	7040.2	6989.8	6781.9	6497.3	6284.1	6682.3	4831.6	3090.6
47.5°	6527.6	6502.0	6781.9	7216.5	7433.1	7520.5	7258.2	6816.1	7089.3	5016.7	3130.2
50°	5618.0	5608.6	6184.5	6982.4	7601.9	8167.7	8060.8	7311.3	7404.8	5112.2	3092.6
52.5°	4871.3	4837.0	5172.7	6232.9	7356.4	8508.1	8845.1	7797.1	7625.5	5130.3	3004.5
55°	3694.7	3664.4	4085.5	4978.9	6564.6	8387.1	9419.0	8298.2	7783.6	5083.9	2846.3
57.5°	1981.9	1963.1	2495.2	3313.9	5131.7	7660.4	9522.7	8828.3	7916.8	4960.8	2625.0
60°	771.6	768.2	967.4	1607.8	3118.9	6232.3	8999.9	9146.6	8000.2	4809.4	2440.0
62.5°	466.9	476.9	509.2	721.8	1377.8	3871.6	7795.0	8784.7	8056.1	4670.8	2287.3
65°	386.1	386.8	390.8	495.8	660.0	1619.9	5868.3	7593.9	7918.1	4423.9	2070.7
67.5°	331.0	337.0	352.5	393.6	465.6	710.4	3378.5	5882.5	7079.3	3849.4	1733.0
70°	261.1	269.1	288.6	323.6	359.3	444.6	1248.7	3914.0	5408.1	2901.6	1310.5
72.5°	220.0	219.4	229.4	263.0	285.3	312.8	480.3	2193.1	3143.1	1385.2	648.5
75°	170.3	176.9	189.7	220.0	233.4	226.7	260.3	801.2	1126.2	419.8	220.7
77.5°	133.2	138.6	150.1	179.6	193.1	160.8	150.1	286.6	361.9	150.7	99.5
80°	59.9	64.6	102.3	132.5	157.4	111.0	81.4	146.7	160.8	68.6	50.4
82.5°	10.8	18.1	59.9	70.0	80.8	72.0	42.3	76.1	78.7	27.6	17.5
85°	0.7	1.3	20.8	25.5	32.3	23.6	12.8	30.2	26.2	9.4	6.8
87.5°	0.0	0.0	0.0	0.7	0.7	3.4	4.0	5.4	4.0	3.4	2.7
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2629.0	2629.0	2629.0	2629.0	2629.0	2629.0	2629.0	2629.0	2629.0	2629.0
2.5°	2586.7	2491.2	2398.3	2322.3	2277.9	2202.5	2152.8	2144.7	2123.8	2142.0
5°	2536.9	2366.0	2193.1	2038.4	1911.2	1747.1	1624.6	1572.9	1527.8	1543.2
7.5°	2513.4	2243.6	1974.5	1710.1	1438.3	1176.0	980.8	899.4	837.5	846.3
10°	2481.7	2116.4	1694.6	1291.0	927.0	668.0	533.5	483.7	456.1	456.7
12.5°	2457.5	1964.4	1369.7	875.2	564.5	426.5	384.8	372.7	364.6	365.3
15°	2445.4	1785.4	1048.8	583.2	403.6	361.2	351.2	345.8	340.4	339.7
17.5°	2425.3	1586.3	767.6	425.9	353.2	338.4	329.6	323.6	316.8	315.5
20°	2394.9	1360.3	561.1	359.9	331.0	319.6	307.4	299.4	291.3	290.0
22.5°	2339.2	1121.5	431.2	333.0	314.9	302.1	287.3	277.9	269.8	268.4
25°	2235.5	897.4	363.3	316.2	300.7	285.3	269.1	256.4	248.9	247.5
27.5°	2104.3	705.0	329.6	300.7	282.6	268.4	250.3	238.1	231.4	230.1
30°	1949.5	542.9	310.2	283.2	261.1	248.9	232.8	222.6	218.6	218.6
32.5°	1782.8	433.9	302.1	265.8	242.2	228.8	216.0	211.9	210.5	209.9
35°	1626.1	376.7	298.1	251.6	225.4	212.6	207.2	207.9	210.5	210.5
37.5°	1486.8	358.5	296.0	241.5	210.5	199.2	202.5	208.6	205.8	205.8
40°	1361.0	360.6	294.7	234.1	198.4	191.8	198.4	193.7	187.1	186.3
42.5°	1264.7	377.4	291.9	228.1	191.1	186.3	183.7	176.3	175.6	176.9
45°	1194.7	392.2	291.3	225.4	183.0	174.2	170.9	163.5	176.9	180.3
47.5°	1112.0	392.2	291.3	216.0	169.5	166.2	160.8	152.7	166.2	169.5
50°	1005.1	367.4	279.8	205.2	158.8	156.7	147.3	137.2	134.6	136.5
52.5°	869.8	322.3	250.9	190.3	148.0	144.0	132.5	125.2	123.1	123.1
55°	715.8	269.8	211.9	168.8	136.5	129.1	121.1	117.8	115.7	114.4
57.5°	581.9	221.3	170.3	150.1	125.8	116.3	113.7	109.7	106.3	104.2
60°	477.6	174.2	140.6	133.2	115.0	106.3	105.6	100.2	91.5	90.1
62.5°	368.7	127.8	118.4	115.7	104.2	96.9	95.5	84.8	71.3	68.6
65°	260.3	99.5	95.5	101.6	92.9	86.1	82.7	66.6	52.5	50.4
67.5°	183.0	83.4	75.3	88.8	80.8	72.0	70.0	56.5	43.8	42.3
70°	130.5	68.0	61.9	76.1	64.6	63.2	59.2	47.0	35.7	34.3
72.5°	92.1	51.8	47.8	65.9	44.4	54.5	48.5	36.3	27.0	25.5
75°	68.0	37.0	33.6	38.3	32.3	41.0	34.3	24.2	16.8	16.2
77.5°	49.8	23.6	20.2	18.9	18.9	25.5	18.9	10.0	7.4	6.8
80°	35.0	10.8	9.4	8.1	7.4	6.0	2.7	1.3	0.7	0.7
82.5°	20.8	4.7	4.7	3.4	2.0	0.0	0.0	0.0	0.0	0.0
85°	4.7	2.0	2.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.7	0.7	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

(END OF REPORT)