

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: P961857

Luminaire Tested: **NAV-SB2B-727-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961857
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-727-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10888.6 lumens
Efficiency: N/A
Efficacy: 147.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G1

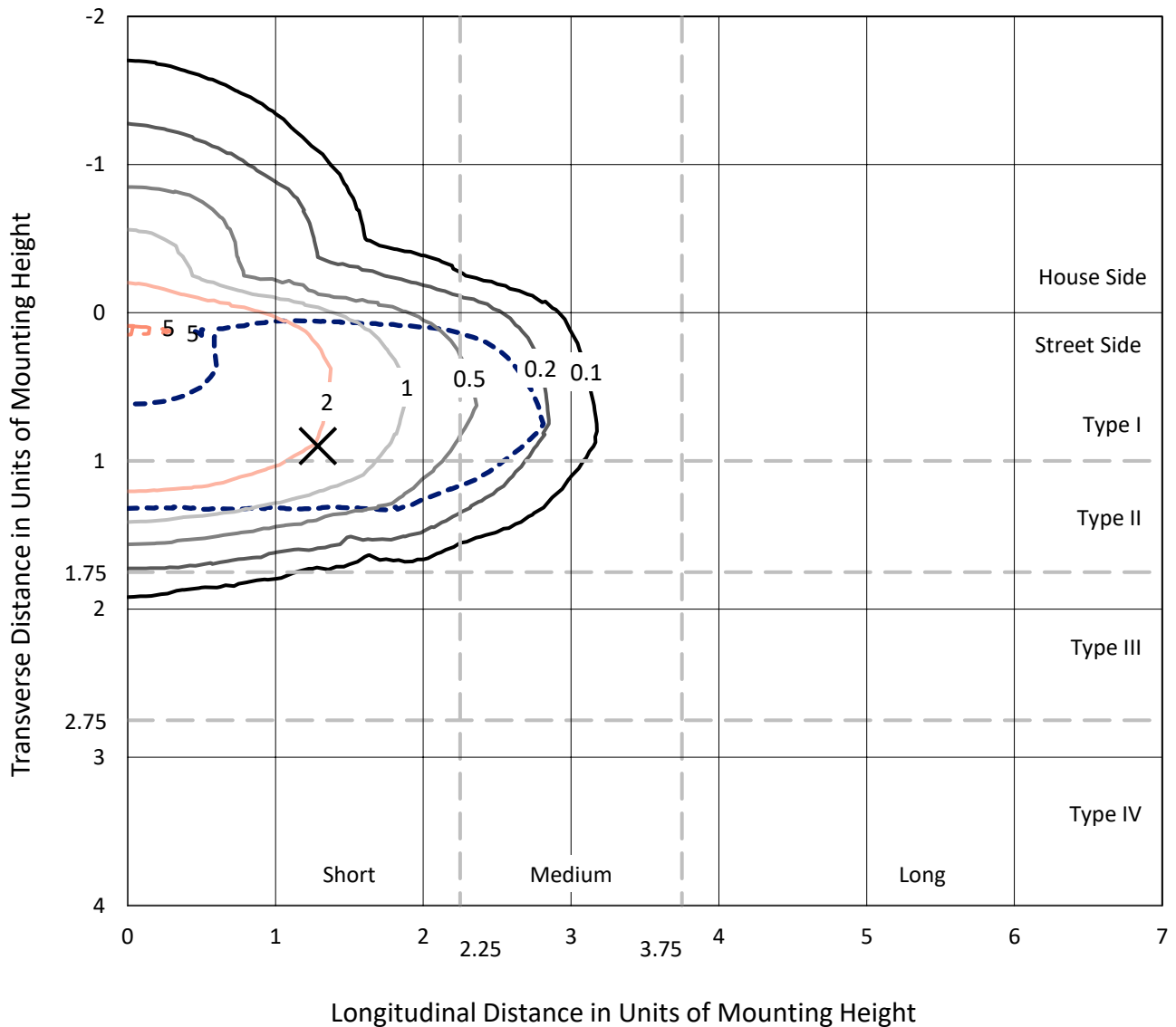
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

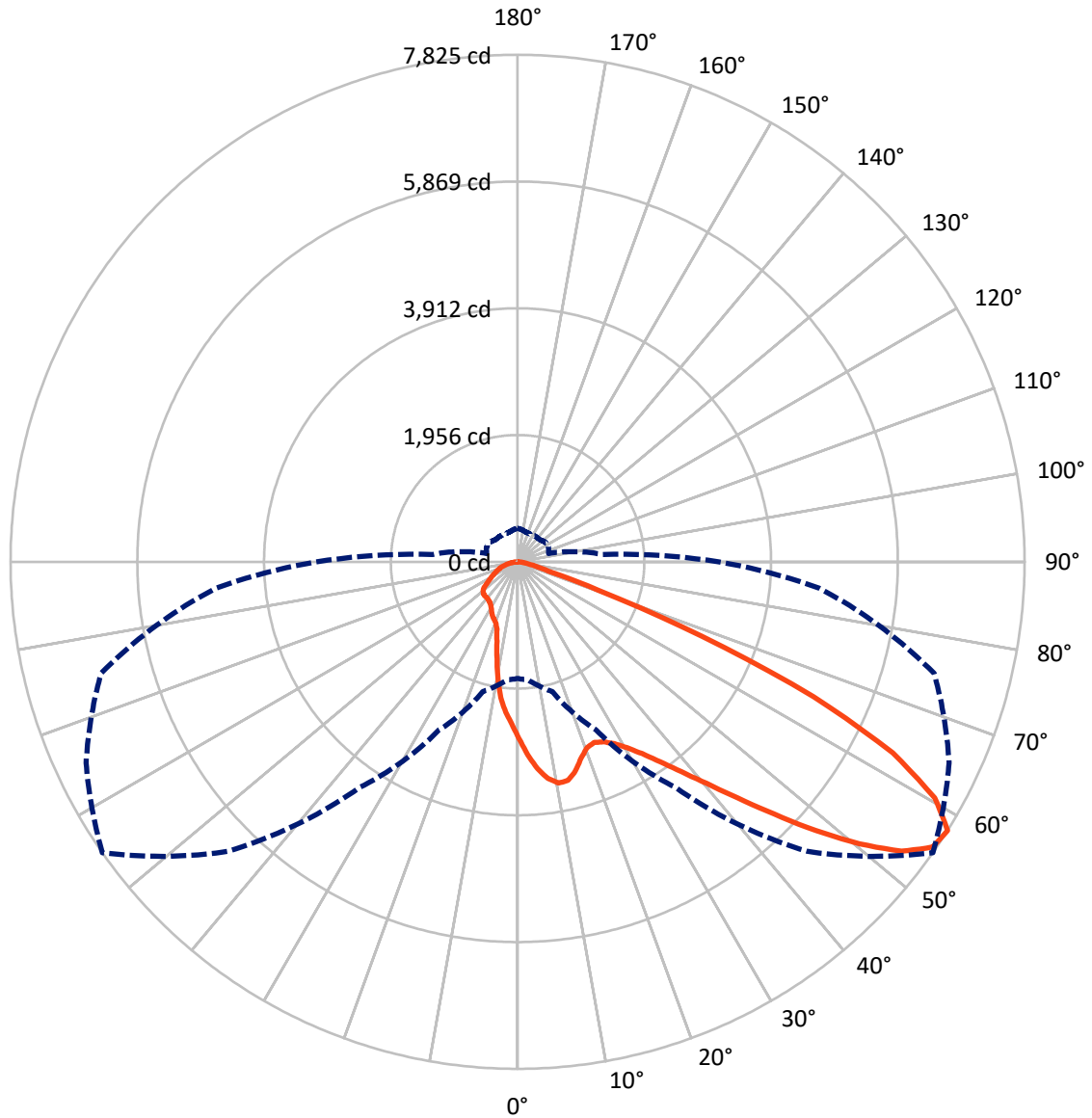
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 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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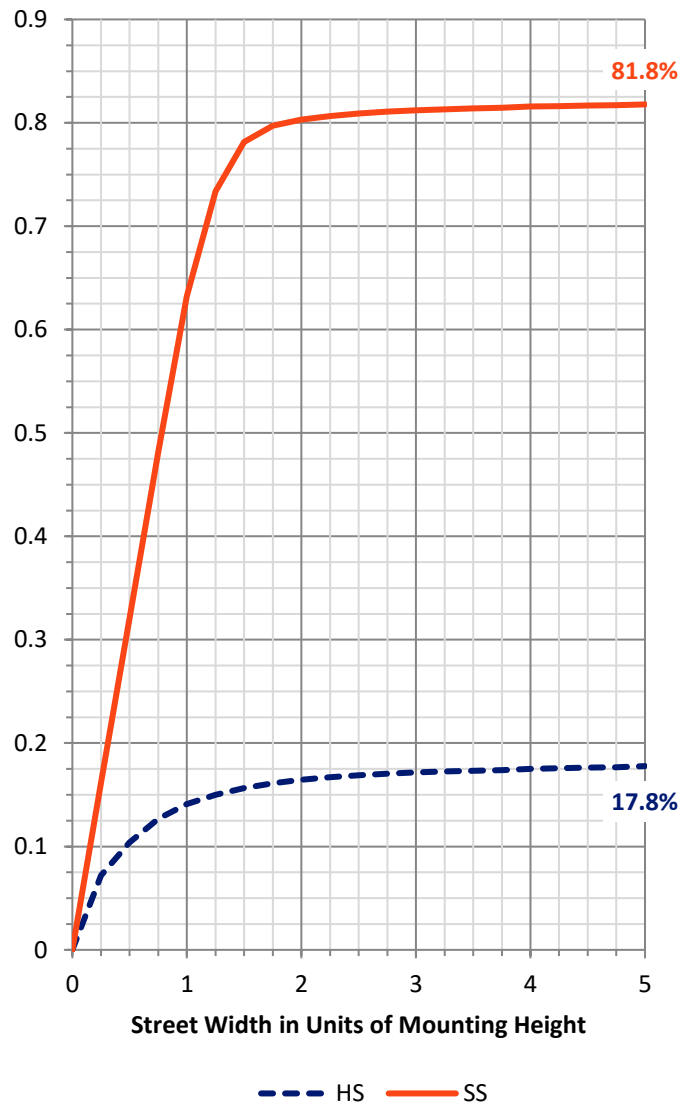
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1970.2	0.0	1970.2
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	8918.4	0.0	8918.4
	% Fixture	81.9	0.0	81.9
Total	Lumens	10888.6	0.0	10888.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.2	2.3
10°-20°	639.0	5.9
20°-30°	1019.7	9.4
30°-40°	1614.4	14.8
40°-50°	2471.0	22.7
50°-60°	2646.7	24.3
60°-70°	1665.1	15.3
70°-80°	492.4	4.5
80°-90°	87.1	0.8
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°	10888.6	100.0
0°-180°	10888.6	100.0

Coefficient of Utilization



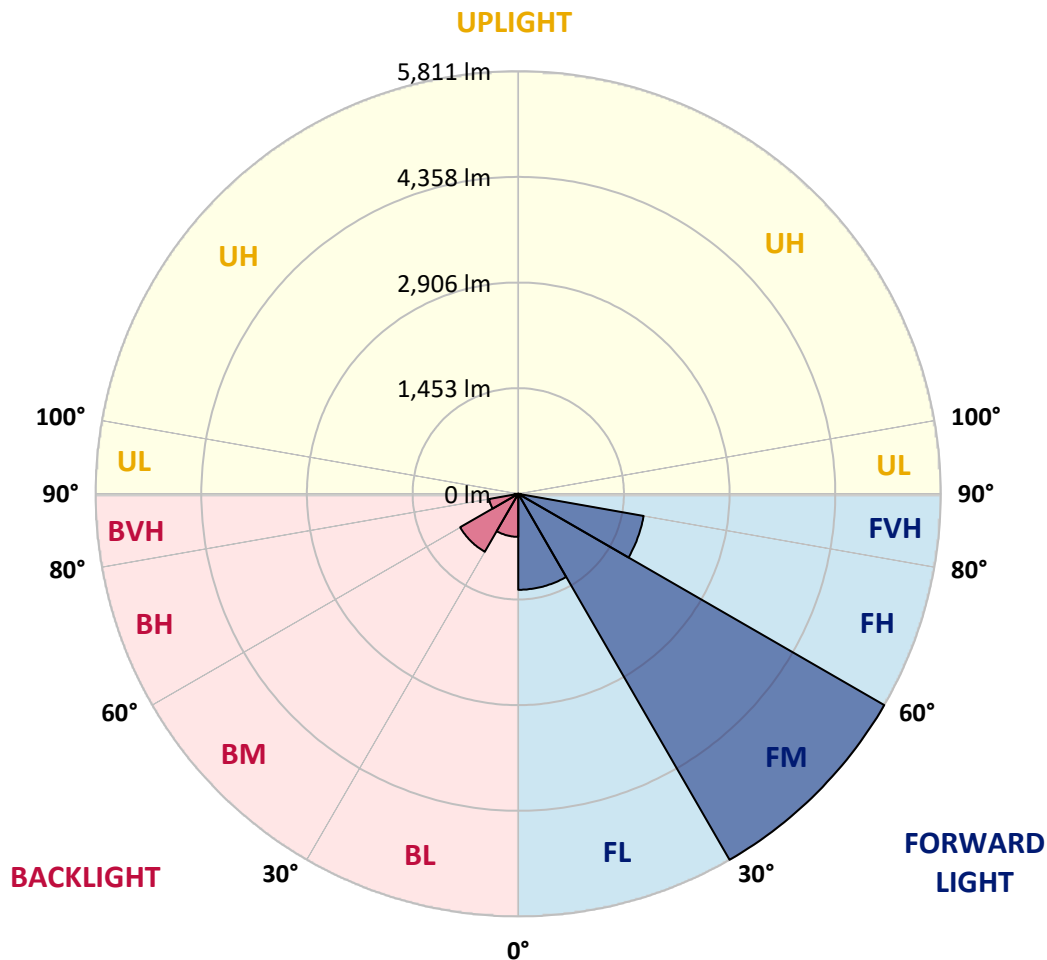
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1319.7	12.1			
FM (30°-60°)	5811.3	53.4			
FH (60°-80°)	1750.6	16.1			G1/1800
FVH (80°-90°)	36.8	0.3			G1/100
BL (0°-30°)	592.2	5.4	B2/1000		
BM (30°-60°)	920.9	8.5	B1/1000		
BH (60°-80°)	406.9	3.7	B1/500		G1/500
BVH (80°-90°)	50.3	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2728.3	2728.3	2728.3	2728.3	2728.3	2728.3	2728.3	2728.3	2728.3	2728.3	2728.3
2.5°	3130.2	3128.0	3140.4	3098.2	3069.5	3030.6	2979.4	2914.1	2843.8	2769.4	2737.4
5°	3412.2	3392.5	3405.5	3374.0	3342.4	3283.9	3207.9	3101.5	2971.5	2823.5	2744.6
7.5°	3367.7	3354.2	3387.4	3415.6	3439.3	3431.9	3376.2	3264.7	3097.0	2882.0	2767.7
10°	3009.2	2994.0	3040.8	3138.1	3281.1	3405.5	3473.0	3403.8	3225.4	2946.2	2790.3
12.5°	2692.9	2685.5	2716.5	2795.3	2954.0	3192.7	3460.6	3525.4	3358.7	3022.1	2820.6
15°	2557.8	2548.8	2568.4	2608.4	2709.8	2932.1	3348.1	3608.7	3489.9	3110.0	2869.1
17.5°	2528.0	2517.8	2526.2	2547.0	2612.4	2781.7	3178.1	3649.8	3626.7	3207.9	2909.6
20°	2583.1	2574.7	2575.8	2574.7	2620.2	2754.8	3059.8	3634.0	3746.1	3297.9	2948.9
22.5°	2716.5	2702.4	2703.0	2673.2	2697.9	2802.0	3028.9	3591.8	3852.5	3376.8	2978.9
25°	2933.8	2908.4	2913.6	2837.5	2830.7	2907.9	3077.4	3559.1	3958.2	3439.8	2984.4
27.5°	3231.0	3202.3	3187.0	3074.0	3019.9	3058.2	3175.9	3570.4	4058.4	3494.4	2970.3
30°	3602.5	3567.6	3536.7	3376.2	3278.3	3264.2	3328.9	3644.7	4176.7	3551.8	2946.2
32.5°	4057.9	4017.4	3961.0	3748.3	3610.4	3536.7	3527.0	3777.0	4315.1	3625.0	2933.8
35°	4599.9	4547.0	4467.1	4191.8	4017.4	3866.5	3788.2	3967.8	4504.8	3735.3	2947.9
37.5°	5158.3	5098.7	5025.5	4697.9	4483.5	4261.0	4106.9	4226.7	4757.5	3885.1	2985.0
40°	5673.4	5606.3	5538.3	5246.7	5016.5	4748.5	4496.9	4554.4	5066.6	4064.0	3048.0
42.5°	5977.3	5927.8	5901.8	5744.3	5566.4	5294.5	4982.1	4942.8	5413.8	4270.0	3120.1
45°	5963.9	5943.6	6023.5	6088.8	6046.6	5895.7	5550.7	5372.2	5762.3	4448.5	3186.5
47.5°	5645.2	5658.7	5837.2	6204.1	6365.8	6444.5	6198.0	5793.8	6065.1	4582.0	3216.3
50°	4778.3	4789.6	5202.8	5994.2	6447.9	6892.0	6840.2	6205.2	6299.9	4663.5	3209.6
52.5°	4092.2	4099.5	4276.8	5371.6	6176.5	7117.2	7418.8	6593.1	6471.5	4686.1	3171.9
55°	3082.4	3107.7	3306.4	4214.4	5470.7	6938.7	7771.2	6992.8	6580.2	4688.3	3132.5
57.5°	1800.7	1828.3	2073.7	2860.6	4252.1	6316.8	7824.7	7347.4	6653.9	4670.3	3108.8
60°	882.0	893.9	1000.8	1503.5	2622.0	5118.3	7394.7	7519.1	6695.0	4660.7	3107.7
62.5°	594.4	592.8	597.3	741.9	1291.8	3288.4	6498.6	7218.5	6673.1	4624.2	3096.4
65°	511.1	504.9	488.0	520.7	669.3	1504.1	5021.0	6321.3	6505.9	4532.3	3019.3
67.5°	441.9	442.4	443.0	432.9	477.9	694.0	3068.3	4979.3	5905.8	4097.8	2722.1
70°	365.9	370.9	373.2	373.2	389.5	455.4	1309.8	3412.8	4658.4	3213.0	2192.5
72.5°	333.2	322.6	323.7	318.1	318.1	346.8	527.5	1934.7	2934.9	1807.5	1338.0
75°	271.8	278.6	279.7	275.8	262.9	264.6	312.9	811.7	1255.8	749.8	661.4
77.5°	234.7	234.7	237.0	234.2	224.1	198.1	208.8	314.7	427.2	307.3	330.5
80°	188.6	188.0	197.6	203.2	187.5	146.4	133.5	173.9	189.7	135.1	171.7
82.5°	91.7	97.4	135.6	154.8	142.4	105.8	81.6	108.0	101.3	59.7	77.1
85°	53.5	50.6	60.8	86.1	81.6	58.5	39.4	56.3	52.9	30.4	31.0
87.5°	16.9	15.8	12.4	29.3	23.7	16.3	10.7	16.3	14.7	6.8	6.8
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°	2728.3	2728.3	2728.3	2728.3	2728.3	2728.3	2728.3	2728.3	2728.3	2728.3
2.5°	2697.4	2631.0	2565.1	2504.9	2468.3	2444.6	2420.9	2394.5	2384.4	2369.2
5°	2670.3	2542.0	2427.7	2329.2	2239.7	2169.4	2098.5	2041.1	2015.2	2032.6
7.5°	2654.5	2468.8	2292.6	2111.9	1938.1	1799.0	1677.9	1593.0	1554.7	1564.3
10°	2640.5	2386.1	2117.5	1832.2	1582.3	1410.0	1286.2	1221.5	1197.3	1202.3
12.5°	2627.6	2293.2	1906.5	1531.0	1265.4	1151.7	1116.2	1116.7	1121.2	1124.6
15°	2625.3	2181.2	1670.6	1267.6	1094.3	1086.9	1125.2	1149.4	1162.4	1166.3
17.5°	2622.0	2047.2	1430.3	1088.0	1052.6	1102.2	1137.6	1153.3	1163.5	1164.1
20°	2608.4	1877.2	1208.5	1002.6	1043.6	1086.4	1108.3	1120.7	1129.1	1132.0
22.5°	2566.8	1688.1	1035.8	964.2	1007.6	1041.9	1067.8	1081.9	1086.9	1090.3
25°	2491.9	1476.4	916.4	927.6	957.5	1000.8	1021.6	1024.5	1022.7	1027.9
27.5°	2394.0	1249.6	842.0	878.1	916.4	953.6	964.8	963.1	959.7	965.3
30°	2275.8	1045.8	794.8	822.4	874.7	908.5	918.6	914.7	907.9	914.1
32.5°	2150.8	879.2	755.9	783.5	840.4	873.6	883.8	879.8	874.7	879.8
35°	2034.3	762.7	720.0	757.7	813.3	846.0	859.0	859.6	859.6	865.7
37.5°	1927.3	694.6	690.1	741.3	794.8	824.1	842.7	843.8	819.6	821.2
40°	1828.3	665.9	676.6	730.6	776.7	804.9	806.1	743.0	698.5	697.4
42.5°	1747.2	660.3	680.5	729.5	763.8	765.0	685.6	636.6	624.2	624.8
45°	1671.3	658.6	689.5	729.5	744.7	660.8	607.3	594.4	595.5	600.0
47.5°	1586.2	651.8	691.3	719.3	689.5	587.6	571.8	566.3	564.1	565.2
50°	1493.3	627.6	669.8	699.2	595.0	556.2	536.4	534.7	537.5	539.3
52.5°	1395.4	588.2	633.2	662.6	551.7	528.6	506.6	510.6	523.0	526.8
55°	1331.3	542.0	584.9	589.4	521.2	502.7	484.1	493.1	516.2	523.5
57.5°	1314.4	493.1	529.7	524.6	482.4	480.1	468.9	476.7	506.0	516.7
60°	1309.2	449.2	475.6	471.7	444.6	455.4	452.5	456.5	466.7	470.0
62.5°	1269.9	414.3	427.2	421.6	410.9	429.5	436.2	427.8	435.6	439.6
65°	1169.7	386.1	380.0	376.0	380.5	397.4	410.9	394.0	401.4	412.6
67.5°	1004.2	347.9	331.0	335.5	349.5	358.5	376.0	356.9	363.1	382.2
70°	812.2	299.5	284.2	297.2	310.7	329.3	332.1	319.2	333.8	355.2
72.5°	574.7	250.5	239.7	266.3	270.7	295.0	288.7	282.6	302.8	310.2
75°	398.5	202.0	195.9	216.2	232.5	253.3	248.8	256.1	298.9	302.3
77.5°	252.2	157.0	153.1	166.0	188.6	211.7	218.9	302.3	510.6	530.8
80°	146.4	117.1	112.5	122.7	142.4	163.8	211.0	370.9	336.6	332.7
82.5°	81.6	80.5	74.8	77.7	95.1	118.2	298.4	261.2	212.2	218.9
85°	38.2	47.3	40.5	38.8	53.5	138.5	199.3	149.1	99.1	96.9
87.5°	10.1	9.0	9.0	10.1	22.5	119.3	79.3	63.7	37.7	36.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)