

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: P961330

Luminaire Tested: **NAV-SB2A-727-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961330
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-SB2A-727-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8673.5 lumens
Efficiency: N/A
Efficacy: 151.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

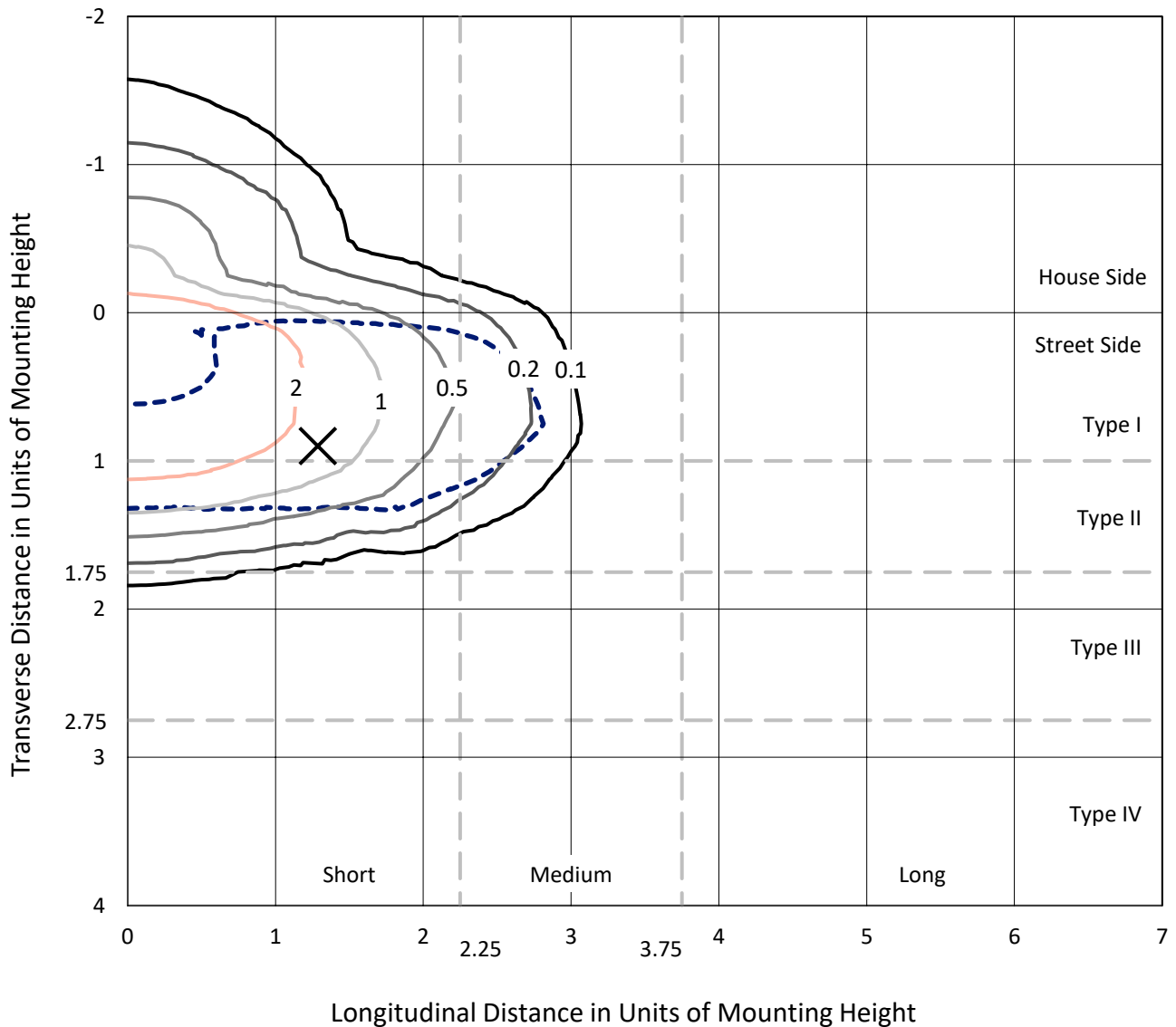
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

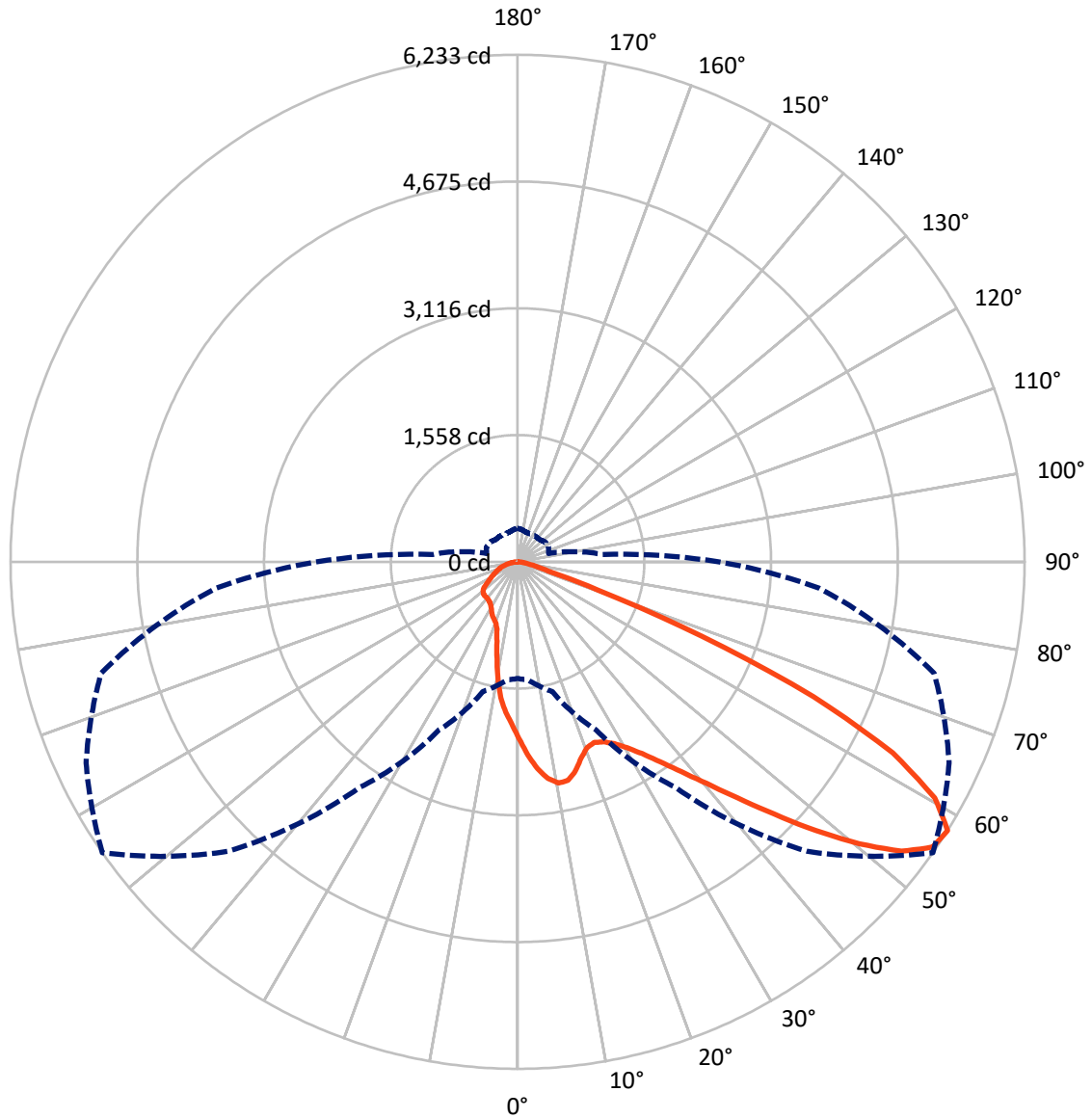
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 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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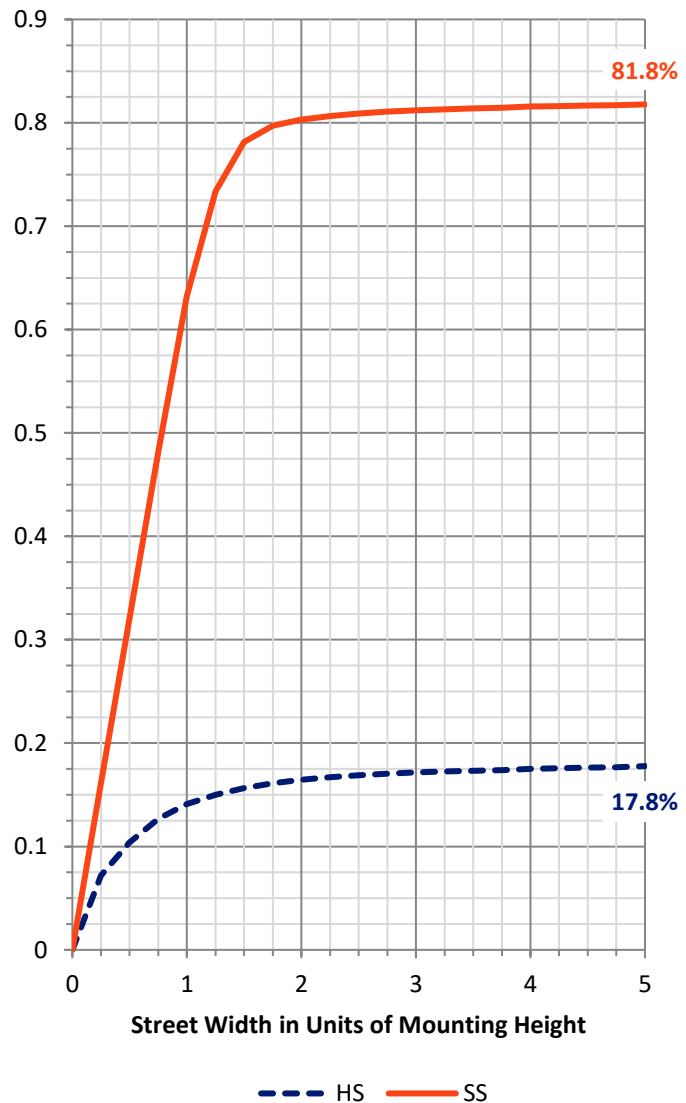
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1569.4	0.0	1569.4
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	7104.1	0.0	7104.1
	% Fixture	81.9	0.0	81.9
Total	Lumens	8673.5	0.0	8673.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.7	2.3
10°-20°	509.0	5.9
20°-30°	812.3	9.4
30°-40°	1286.0	14.8
40°-50°	1968.4	22.7
50°-60°	2108.3	24.3
60°-70°	1326.3	15.3
70°-80°	392.2	4.5
80°-90°	69.3	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°	8673.5	100.0
0°-180°	8673.5	100.0

Coefficient of Utilization

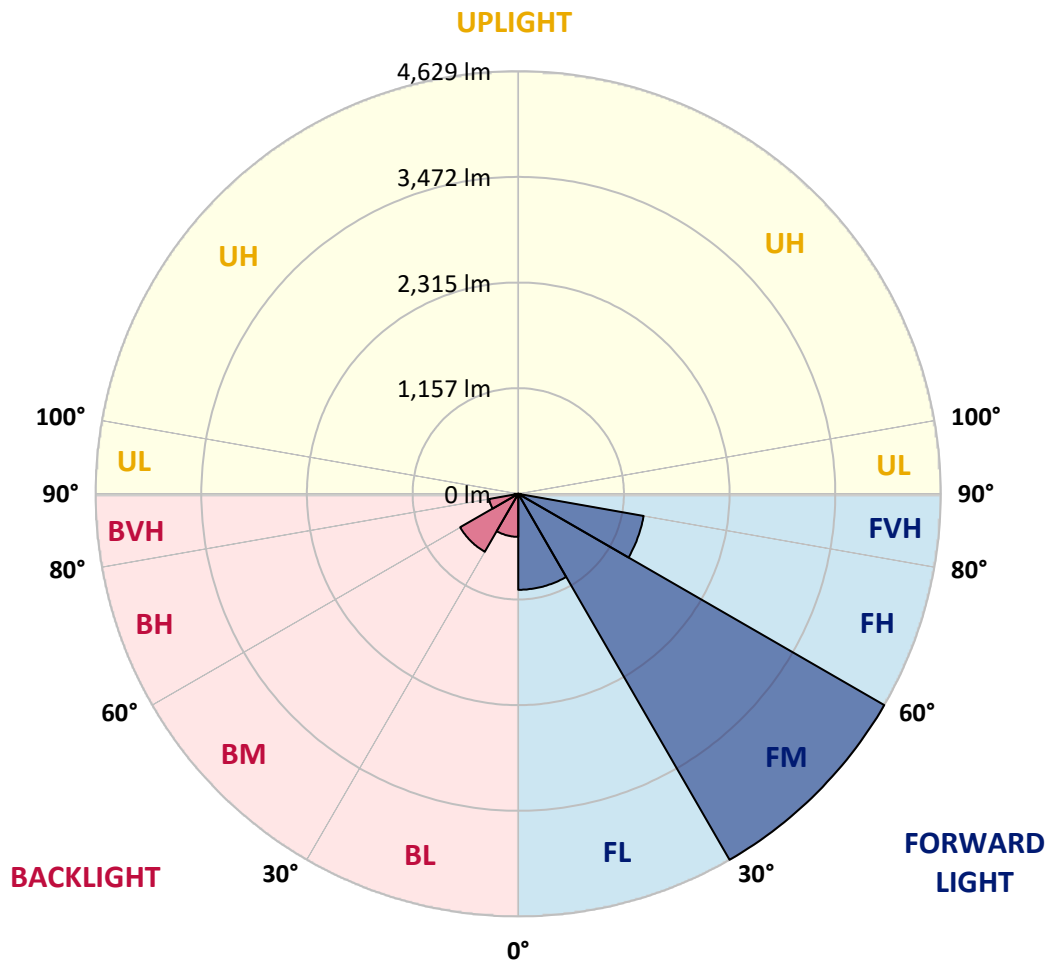


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1051.2	12.1			
FM (30°-60°)	4629.1	53.4			
FH (60°-80°)	1394.4	16.1			G1/1800
FVH (80°-90°)	29.3	0.3			G1/100
BL (0°-30°)	471.7	5.4	B1/500		
BM (30°-60°)	733.5	8.5	B1/1000		
BH (60°-80°)	324.1	3.7	B1/500		G1/500
BVH (80°-90°)	40.0	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1
 Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2173.3	2173.3	2173.3	2173.3	2173.3	2173.3	2173.3	2173.3	2173.3	2173.3	2173.3
2.5°	2493.4	2491.7	2501.5	2467.9	2445.0	2414.1	2373.3	2321.3	2265.2	2206.0	2180.5
5°	2718.1	2702.4	2712.8	2687.7	2662.5	2615.9	2555.3	2470.6	2367.0	2249.1	2186.3
7.5°	2682.6	2671.9	2698.4	2720.8	2739.6	2733.8	2689.4	2600.6	2467.0	2295.7	2204.7
10°	2397.1	2385.0	2422.2	2499.8	2613.6	2712.8	2766.5	2711.3	2569.3	2346.8	2222.6
12.5°	2145.0	2139.3	2163.9	2226.7	2353.1	2543.2	2756.6	2808.2	2675.5	2407.3	2246.8
15°	2037.5	2030.3	2046.0	2077.8	2158.5	2335.7	2666.9	2874.6	2780.0	2477.3	2285.4
17.5°	2013.7	2005.6	2012.4	2028.9	2081.0	2215.9	2531.5	2907.3	2889.0	2555.3	2317.7
20°	2057.6	2050.9	2051.8	2050.9	2087.2	2194.4	2437.4	2894.8	2984.0	2627.1	2349.1
22.5°	2163.9	2152.7	2153.1	2129.3	2149.1	2232.0	2412.7	2861.1	3068.7	2689.8	2372.9
25°	2337.0	2316.8	2320.8	2260.3	2254.9	2316.3	2451.3	2835.1	3153.0	2740.0	2377.3
27.5°	2573.7	2550.8	2538.7	2448.6	2405.6	2436.0	2529.8	2844.1	3232.8	2783.6	2366.1
30°	2869.7	2841.8	2817.2	2689.4	2611.4	2600.2	2651.8	2903.3	3327.0	2829.3	2346.8
32.5°	3232.4	3200.2	3155.3	2985.8	2875.9	2817.2	2809.5	3008.7	3437.3	2887.6	2337.0
35°	3664.2	3622.0	3558.4	3339.1	3200.2	3079.9	3017.6	3160.7	3588.4	2975.5	2348.2
37.5°	4109.0	4061.5	4003.1	3742.2	3571.4	3394.3	3271.4	3366.9	3789.7	3094.8	2377.8
40°	4519.2	4465.9	4411.6	4179.3	3996.0	3782.6	3582.2	3627.9	4035.9	3237.4	2428.0
42.5°	4761.3	4721.9	4701.3	4575.7	4434.0	4217.5	3968.6	3937.2	4312.6	3401.5	2485.4
45°	4750.6	4734.5	4798.1	4850.2	4816.5	4696.3	4421.5	4279.4	4590.1	3543.5	2538.3
47.5°	4496.8	4507.5	4649.7	4942.0	5070.8	5133.5	4937.1	4615.2	4831.3	3649.8	2562.1
50°	3806.3	3815.3	4144.4	4774.9	5136.2	5490.0	5448.7	4943.0	5018.3	3714.8	2556.7
52.5°	3259.7	3265.5	3406.8	4279.0	4920.1	5669.4	5909.6	5251.9	5155.0	3732.7	2526.6
55°	2455.4	2475.5	2633.8	3357.1	4357.8	5527.2	6190.4	5570.3	5241.5	3734.6	2495.3
57.5°	1434.4	1456.3	1651.9	2278.7	3387.1	5031.7	6232.9	5852.7	5300.4	3720.2	2476.4
60°	702.6	712.1	797.2	1197.6	2088.5	4077.1	5890.4	5989.5	5333.1	3712.7	2475.5
62.5°	473.4	472.1	475.7	591.0	1029.0	2619.5	5176.6	5750.0	5315.5	3683.4	2466.6
65°	407.1	402.2	388.8	414.7	533.1	1198.1	3999.6	5035.3	5182.4	3610.4	2405.2
67.5°	352.0	352.4	352.9	344.8	380.7	552.9	2444.1	3966.4	4704.4	3264.2	2168.4
70°	291.4	295.5	297.2	297.2	310.3	362.7	1043.3	2718.5	3710.8	2559.3	1746.5
72.5°	265.5	257.0	257.8	253.4	253.4	276.2	420.1	1541.1	2337.8	1439.7	1065.8
75°	216.6	221.9	222.8	219.7	209.4	210.7	249.3	646.6	1000.3	597.3	526.8
77.5°	187.0	187.0	188.8	186.5	178.5	157.8	166.4	250.6	340.3	244.8	263.2
80°	150.2	149.8	157.3	161.8	149.3	116.5	106.3	138.6	151.1	107.6	136.7
82.5°	73.1	77.6	108.0	123.3	113.5	84.3	65.0	86.1	80.7	47.6	61.4
85°	42.6	40.4	48.4	68.6	65.0	46.6	31.4	44.8	42.1	24.2	24.7
87.5°	13.4	12.5	9.8	23.3	18.9	13.0	8.5	13.0	11.7	5.3	5.3
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2173.3	2173.3	2173.3	2173.3	2173.3	2173.3	2173.3	2173.3	2173.3	2173.3
2.5°	2148.6	2095.7	2043.2	1995.3	1966.2	1947.3	1928.5	1907.4	1899.3	1887.2
5°	2127.1	2024.9	1933.9	1855.5	1784.1	1728.0	1671.6	1625.9	1605.3	1619.1
7.5°	2114.6	1966.6	1826.2	1682.3	1543.8	1433.1	1336.6	1268.9	1238.4	1246.1
10°	2103.4	1900.7	1686.8	1459.5	1260.4	1123.2	1024.6	973.0	953.7	957.8
12.5°	2093.0	1826.8	1518.6	1219.6	1008.0	917.4	889.2	889.6	893.2	895.8
15°	2091.2	1737.5	1330.8	1009.7	871.7	865.8	896.4	915.6	925.9	929.1
17.5°	2088.5	1630.8	1139.4	866.7	838.4	877.9	906.2	918.7	926.8	927.2
20°	2077.8	1495.4	962.7	798.6	831.3	865.4	882.8	892.8	899.4	901.7
22.5°	2044.7	1344.7	825.0	768.0	802.6	829.9	850.5	861.8	865.8	868.5
25°	1985.0	1176.1	730.0	738.9	762.7	797.2	813.8	816.1	814.7	818.8
27.5°	1907.0	995.4	670.8	699.5	730.0	759.5	768.5	767.2	764.4	769.0
30°	1812.8	833.1	633.1	655.1	696.8	723.6	731.7	728.7	723.2	728.2
32.5°	1713.3	700.4	602.2	624.1	669.4	695.9	704.0	700.8	696.8	700.8
35°	1620.4	607.5	573.5	603.5	647.9	673.9	684.2	684.7	684.7	689.6
37.5°	1535.2	553.3	549.7	590.5	633.1	656.4	671.3	672.1	652.8	654.2
40°	1456.3	530.4	538.9	582.0	618.8	641.1	642.1	591.8	556.5	555.6
42.5°	1391.7	525.9	542.1	581.1	608.4	609.4	546.1	507.2	497.2	497.7
45°	1331.3	524.6	549.3	581.1	593.2	526.4	483.8	473.4	474.4	478.0
47.5°	1263.5	519.3	550.6	573.1	549.3	468.1	455.5	451.1	449.3	450.2
50°	1189.5	500.0	533.6	556.9	474.0	443.0	427.3	426.0	428.2	429.6
52.5°	1111.5	468.5	504.4	527.8	439.4	421.1	403.5	406.7	416.6	419.6
55°	1060.5	431.8	465.9	469.4	415.2	400.4	385.6	392.8	411.1	417.0
57.5°	1046.9	392.8	421.9	417.9	384.3	382.4	373.5	379.8	403.1	411.6
60°	1042.9	357.8	378.8	375.8	354.2	362.7	360.5	363.7	371.7	374.4
62.5°	1011.6	330.0	340.3	335.8	327.3	342.1	347.5	340.8	347.1	350.1
65°	931.7	307.6	302.7	299.5	303.1	316.5	327.3	313.9	319.7	328.6
67.5°	799.9	277.1	263.6	267.2	278.5	285.7	299.5	284.2	289.3	304.4
70°	647.0	238.5	226.4	236.8	247.5	262.3	264.6	254.2	265.9	282.9
72.5°	457.8	199.6	191.1	212.1	215.7	234.9	230.0	225.1	241.2	247.0
75°	317.4	160.9	156.0	172.2	185.2	201.8	198.2	204.0	238.1	240.8
77.5°	200.9	125.0	122.0	132.2	150.2	168.6	174.5	240.8	406.7	422.8
80°	116.5	93.3	89.7	97.8	113.5	130.5	168.1	295.5	268.1	265.0
82.5°	65.0	64.2	59.7	61.9	75.7	94.2	237.6	208.1	169.0	174.5
85°	30.4	37.6	32.3	31.0	42.6	110.3	158.8	118.8	78.9	77.1
87.5°	8.1	7.2	7.2	8.1	17.9	95.0	63.2	50.6	30.0	29.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)