

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: P883411

Luminaire Tested: **NAV-SB3D-727-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883411
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-727-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27340 lumens
Efficiency: N/A
Efficacy: 125.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

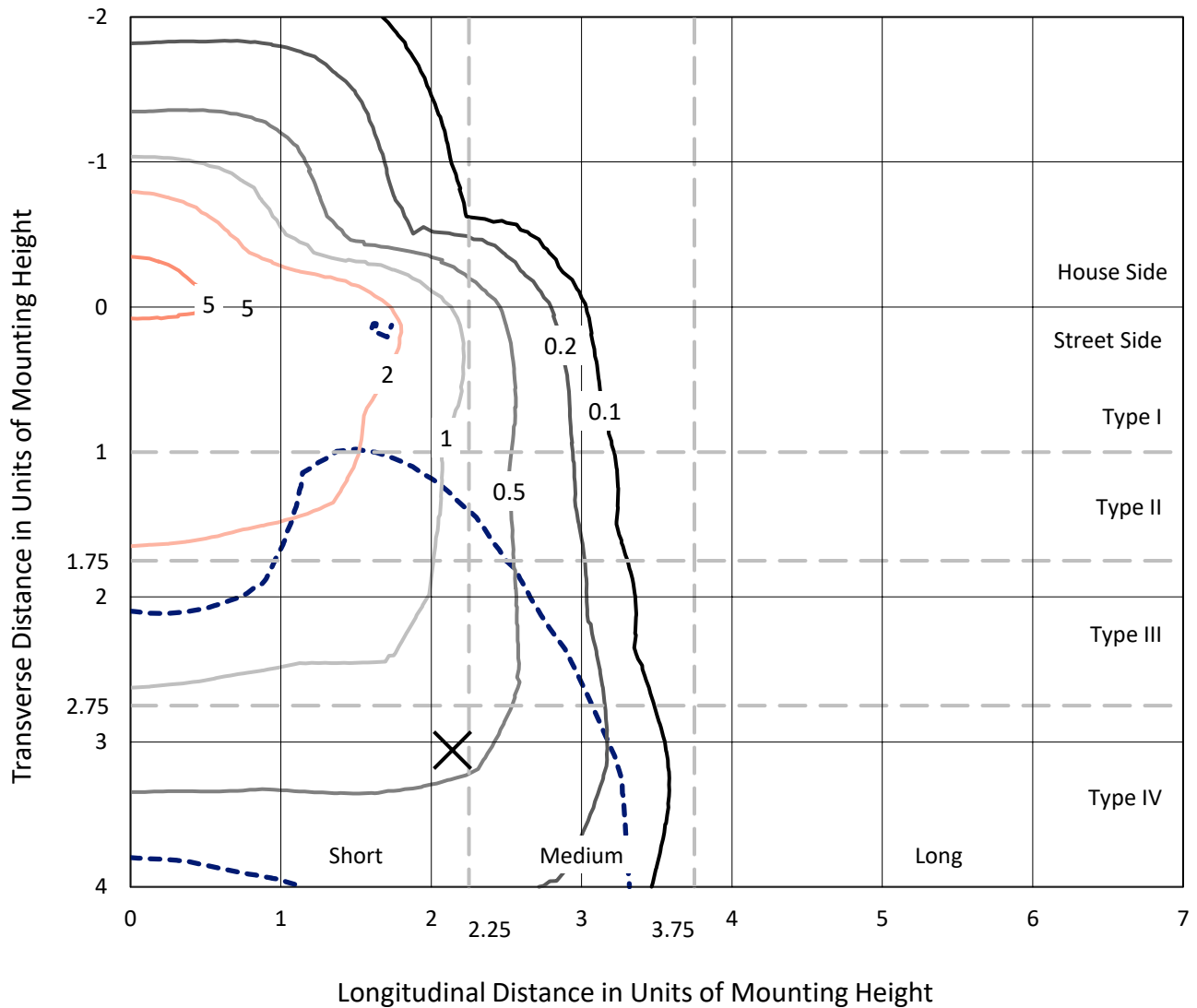
Input Watts (W): 218.1
Input Voltage (V): 120.0
Input Current (Ain): 1.84
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

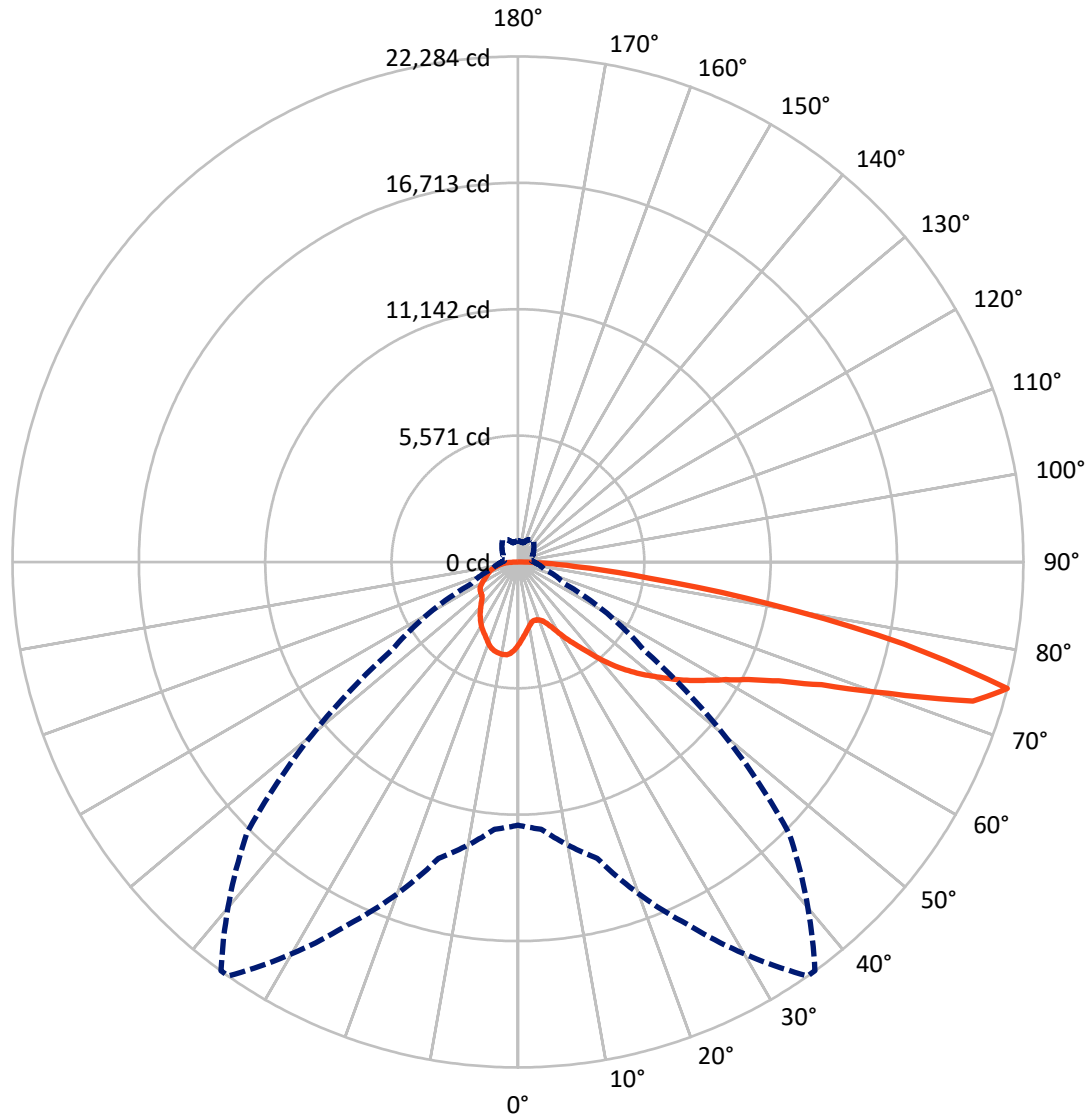
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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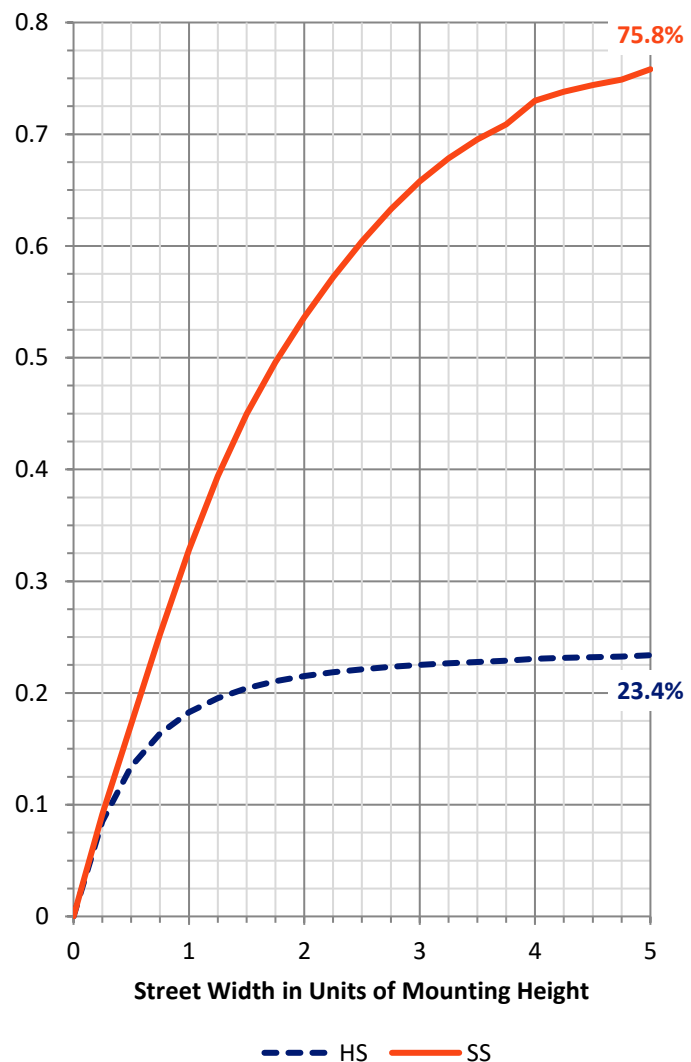
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6506.2	0.0	6506.2
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	20833.8	0.0	20833.8
	% Fixture	76.2	0.0	76.2
Total	Lumens	27340.0	0.0	27340.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	344.9	1.3
10°-20°	995.0	3.6
20°-30°	1670.8	6.1
30°-40°	2596.7	9.5
40°-50°	3854.1	14.1
50°-60°	5320.9	19.5
60°-70°	6455.4	23.6
70°-80°	5334.9	19.5
80°-90°	767.3	2.8
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°	27340.0	100.0
0°-180°	27340.0	100.0

Coefficient of Utilization



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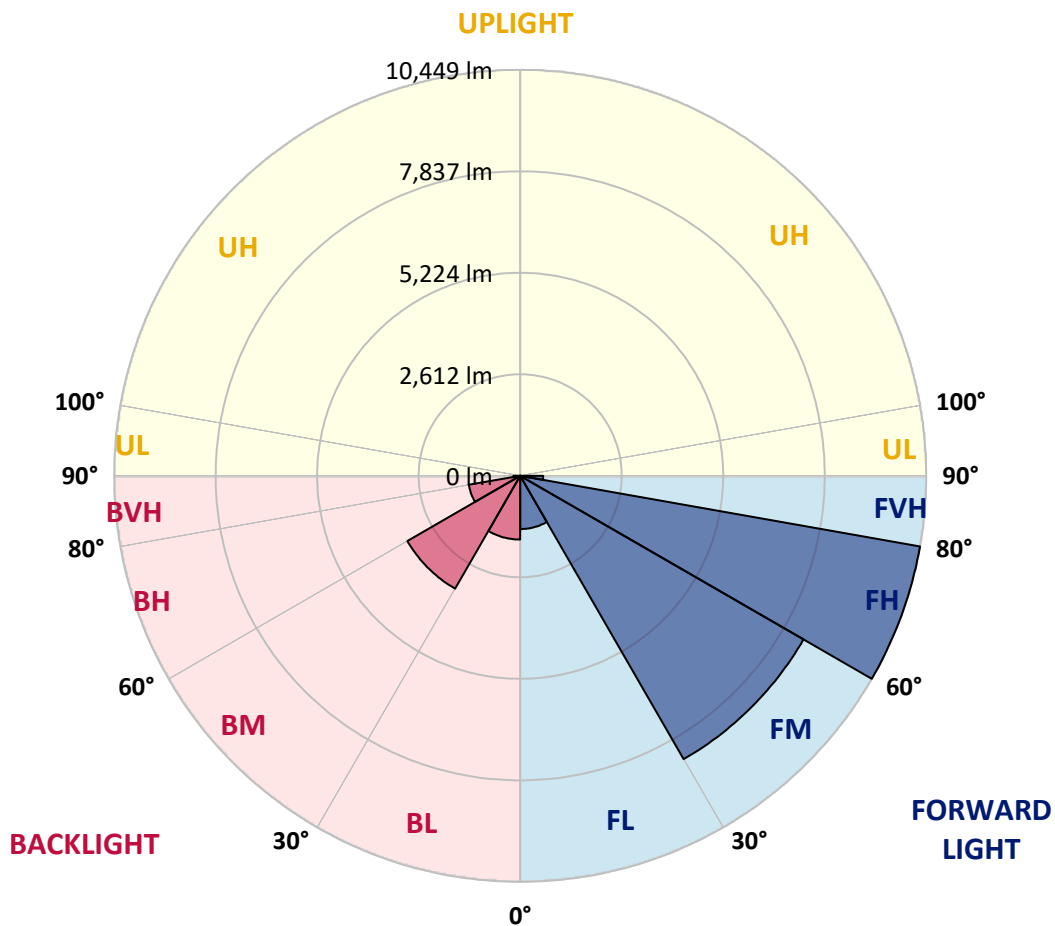
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1371.0	5.0			
FM (30°-60°)	8419.2	30.8			
FH (60°-80°)	10448.9	38.2			G4/12000
FVH (80°-90°)	594.5	2.2			G4/750
BL (0°-30°)	1639.7	6.0	B3/2500		
BM (30°-60°)	3352.4	12.3	B3/5000		
BH (60°-80°)	1341.4	4.9	B3/2500		G3/2500
BVH (80°-90°)	172.8	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3643.2	3643.2	3643.2	3643.2	3643.2	3643.2	3643.2	3643.2	3643.2	3643.2	3643.2
2.5°	3359.5	3380.2	3389.0	3384.6	3406.8	3403.8	3434.8	3473.3	3526.5	3578.2	3653.6
5°	3100.8	3123.0	3142.2	3159.9	3202.8	3216.1	3264.9	3338.8	3436.3	3535.3	3659.5
7.5°	2859.9	2879.1	2908.7	2941.2	3013.6	3026.9	3108.2	3223.5	3359.5	3504.3	3675.8
10°	2663.3	2682.5	2713.6	2750.5	2840.7	2857.0	2960.4	3114.1	3291.5	3474.7	3693.5
12.5°	2579.1	2585.0	2602.7	2639.7	2718.0	2728.4	2842.2	3018.1	3225.0	3452.6	3720.1
15°	2574.7	2586.5	2588.0	2607.2	2672.2	2676.6	2781.6	2956.0	3183.6	3448.1	3760.0
17.5°	2619.0	2627.9	2614.6	2626.4	2681.1	2688.5	2771.2	2926.4	3170.3	3467.4	3828.0
20°	2737.2	2744.6	2704.7	2688.5	2728.4	2734.3	2815.6	2945.6	3183.6	3507.3	3921.1
22.5°	2988.5	2992.9	2895.4	2828.9	2831.8	2834.8	2905.7	3024.0	3235.3	3579.7	4039.3
25°	3380.2	3377.2	3222.0	3093.4	3019.5	3003.3	3050.6	3151.1	3322.5	3675.8	4191.6
27.5°	3838.3	3816.2	3661.0	3468.8	3307.7	3284.1	3273.7	3316.6	3446.7	3802.9	4377.8
30°	4355.6	4334.9	4167.9	3916.7	3693.5	3655.1	3557.5	3535.3	3631.4	3975.8	4636.4
32.5°	4923.2	4909.9	4710.3	4405.9	4107.3	4063.0	3898.9	3839.8	3915.2	4237.4	4997.1
35°	5399.1	5387.3	5221.7	4908.4	4543.3	4488.6	4321.6	4255.1	4293.6	4572.9	5468.6
37.5°	5829.2	5823.3	5681.4	5434.6	5057.7	4991.2	4803.5	4781.3	4773.9	5014.8	6040.5
40°	6228.2	6213.5	6065.7	5935.6	5656.3	5595.7	5430.1	5410.9	5354.7	5558.7	6687.9
42.5°	6670.2	6631.7	6417.4	6356.8	6281.4	6231.2	6132.2	6135.1	6011.0	6172.1	7373.7
45°	7030.8	7008.6	6788.4	6752.9	6834.2	6813.5	6899.2	6921.4	6680.5	6815.0	8086.1
47.5°	7418.0	7397.3	7211.1	7186.0	7406.2	7412.1	7715.1	7722.5	7333.8	7483.1	8799.9
50°	7895.4	7865.9	7681.1	7712.1	7959.0	7981.1	8535.4	8485.1	7935.3	8161.4	9507.9
52.5°	8210.2	8228.0	8188.1	8238.3	8575.3	8596.0	9342.4	9213.8	8530.9	8831.0	10202.5
55°	8442.3	8477.7	8601.9	8717.2	9225.6	9246.3	10103.5	9907.0	9024.6	9451.7	10855.8
57.5°	8740.8	8690.6	8922.6	9147.3	9843.4	9898.1	10844.0	10575.0	9462.1	9986.8	11303.7
60°	9169.4	9134.0	9314.3	9646.8	10535.1	10622.3	11627.3	11176.5	9782.8	10410.9	11390.9
62.5°	10038.5	9949.8	9977.9	10272.0	11407.1	11522.4	12511.2	11701.2	9942.4	10576.5	10923.8
65°	11337.6	11185.4	11043.5	11247.5	12635.3	12749.1	13508.8	12113.6	9883.3	10255.8	9683.8
67.5°	12973.8	12823.0	12648.6	12840.8	14444.4	14534.5	14740.0	12345.6	9417.7	9020.2	7491.9
70°	14323.2	14267.0	14475.4	15266.1	17333.8	17336.8	16318.5	12153.5	8142.2	6395.3	4334.9
72.5°	14144.3	14110.3	15208.5	17653.1	20975.6	20897.3	17812.7	10699.2	5484.8	2885.0	1624.3
75°	11603.7	11823.9	13525.1	17610.2	22283.6	22273.3	16897.8	6801.7	2268.7	1195.7	839.5
77.5°	6222.3	6571.1	8780.7	13001.9	17395.9	17657.5	11880.1	2379.6	974.0	765.6	580.8
80°	2029.3	2333.7	3499.9	6619.9	11303.7	11254.9	5091.7	934.1	666.6	542.4	402.0
82.5°	861.7	897.1	1563.7	3125.9	5801.1	5710.9	1621.4	536.5	468.5	371.0	248.3
85°	337.0	376.9	690.2	1445.5	2512.6	2457.9	585.3	266.0	300.0	242.4	147.8
87.5°	110.8	134.5	246.8	495.1	781.9	753.8	143.4	91.6	130.1	110.8	53.2
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°	3643.2	3643.2	3643.2	3643.2	3643.2	3643.2	3643.2	3643.2	3643.2	3643.2	3643.2
2.5°	3674.3	3697.9	3726.0	3767.4	3802.9	3832.4	3863.5	3882.7	3890.1	3912.2	3910.8
5°	3700.9	3752.6	3822.1	3890.1	3956.6	3996.5	4032.0	4049.7	4065.9	4077.8	4080.7
7.5°	3745.2	3811.7	3921.1	4009.8	4065.9	4098.5	4122.1	4116.2	4122.1	4125.1	4129.5
10°	3783.6	3876.8	4006.8	4091.1	4133.9	4135.4	4129.5	4108.8	4098.5	4099.9	4102.9
12.5°	3829.5	3932.9	4073.3	4144.3	4156.1	4123.6	4098.5	4063.0	4049.7	4043.8	4040.8
15°	3891.5	4009.8	4145.8	4172.4	4142.8	4101.4	4058.6	4000.9	3971.4	3947.7	3955.1
17.5°	3966.9	4097.0	4201.9	4182.7	4119.2	4051.2	3981.7	3894.5	3833.9	3808.8	3810.3
20°	4071.9	4188.6	4244.8	4160.5	4064.5	3961.0	3842.8	3736.4	3680.2	3655.1	3652.1
22.5°	4199.0	4311.3	4286.2	4122.1	3986.1	3820.6	3672.8	3594.5	3566.4	3548.6	3551.6
25°	4351.2	4447.3	4315.7	4065.9	3857.5	3634.4	3520.6	3495.4	3482.1	3468.8	3468.8
27.5°	4549.2	4601.0	4337.9	3983.2	3656.5	3436.3	3394.9	3399.4	3394.9	3372.8	3377.2
30°	4810.9	4800.5	4358.6	3848.7	3426.0	3257.5	3260.4	3279.7	3282.6	3267.8	3275.2
32.5°	5155.2	5050.3	4368.9	3674.3	3205.8	3100.8	3103.8	3124.5	3139.2	3114.1	3125.9
35°	5572.0	5341.4	4352.7	3455.5	3035.8	2951.5	2929.4	2935.3	2939.7	2916.1	2932.3
37.5°	6058.3	5668.1	4280.3	3213.1	2895.4	2805.2	2757.9	2718.0	2694.4	2672.2	2687.0
40°	6591.8	6024.3	4147.2	2976.7	2738.7	2650.0	2579.1	2503.7	2423.9	2394.3	2407.6
42.5°	7150.5	6390.8	3986.1	2750.5	2558.4	2486.0	2410.6	2301.2	2181.5	2120.9	2128.3
45°	7729.9	6766.2	3828.0	2527.4	2373.6	2342.6	2255.4	2123.9	1993.8	1917.0	1911.0
47.5°	8297.4	7120.9	3595.9	2302.7	2200.7	2234.7	2166.7	2045.5	1900.7	1779.5	1766.2
50°	8839.8	7453.5	3216.1	2075.1	2060.3	2202.2	2137.2	1962.8	1797.2	1642.0	1628.7
52.5°	9377.8	7722.5	2729.8	1868.2	1984.9	2193.3	2098.7	1906.6	1704.1	1541.5	1523.8
55°	9834.5	7861.4	2261.3	1690.8	1875.6	2118.0	2052.9	1840.1	1572.6	1399.7	1384.9
57.5°	10094.7	7749.1	1871.1	1516.4	1724.8	1993.8	1974.6	1698.2	1415.9	1282.9	1265.2
60°	9982.3	7293.9	1551.9	1364.2	1581.4	1859.3	1838.6	1557.8	1296.2	1170.6	1152.8
62.5°	9363.1	6426.3	1299.2	1231.2	1451.4	1721.9	1702.6	1449.9	1204.6	1083.4	1064.2
65°	8115.6	5227.6	1102.6	1120.3	1319.8	1556.3	1584.4	1359.7	1132.1	1013.9	994.7
67.5°	6189.8	3786.6	948.9	1024.2	1191.3	1393.7	1475.0	1294.7	1071.5	959.2	941.5
70°	3528.0	2150.5	818.8	931.1	1077.5	1243.0	1390.8	1243.0	1006.5	913.4	901.6
72.5°	1337.6	987.3	708.0	838.0	968.1	1115.9	1297.7	1161.7	931.1	861.7	849.8
75°	713.9	601.5	595.6	728.6	842.5	991.7	1180.9	1081.9	875.0	910.4	940.0
77.5°	486.3	425.7	498.1	623.7	705.0	854.3	1056.8	960.7	758.2	755.3	696.1
80°	337.0	301.5	405.0	502.5	545.4	718.3	922.3	824.7	617.8	576.4	551.3
82.5°	202.5	196.6	303.0	375.4	385.8	554.2	764.1	691.7	505.5	440.4	443.4
85°	110.8	116.8	193.6	220.2	224.7	387.2	598.6	535.0	388.7	326.6	329.6
87.5°	31.0	39.9	70.9	87.2	107.9	201.0	356.2	317.8	195.1	136.0	136.0
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)