

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: P968237

Luminaire Tested: **NAV-SB5B-730-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968237
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-730-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22458.8 lumens
Efficiency: N/A
Efficacy: 122.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

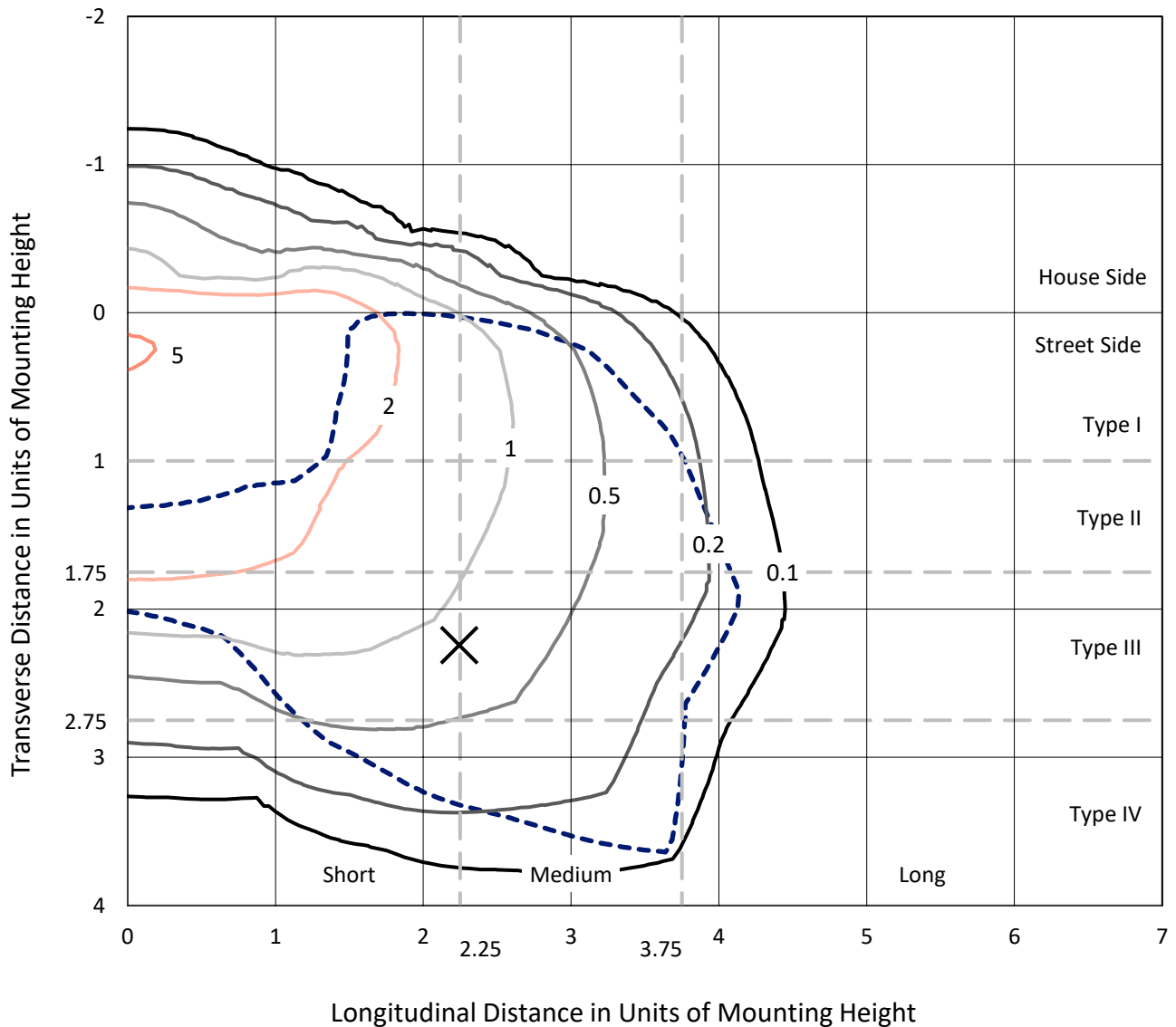
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

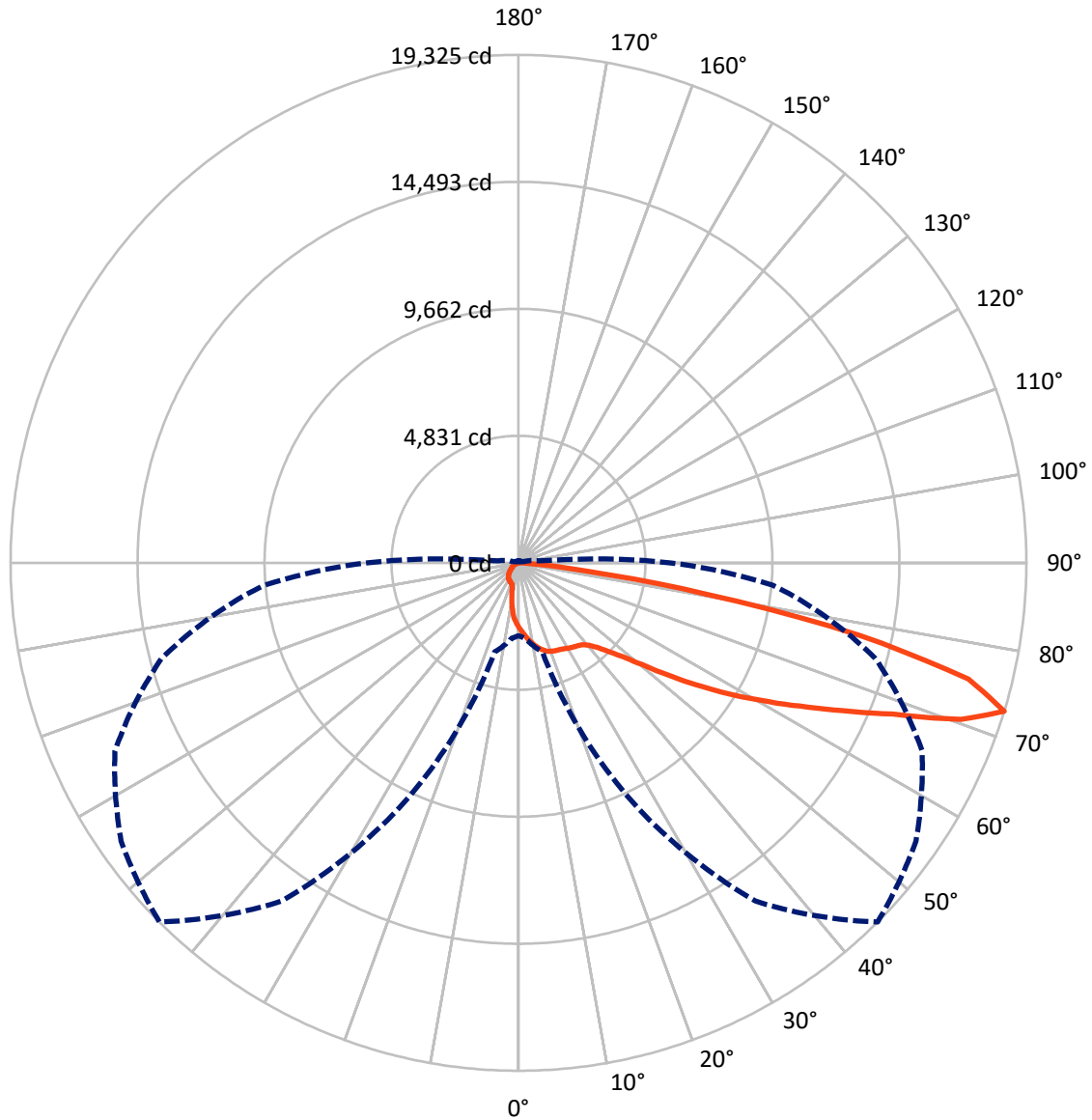
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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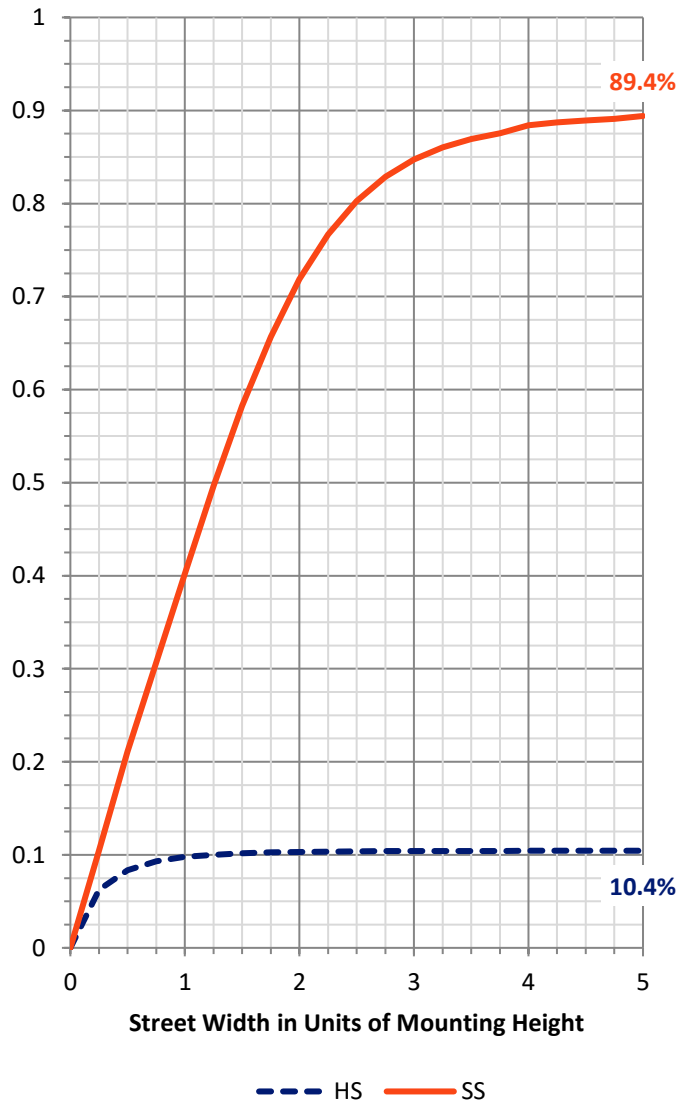
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2359.8	0.0	2359.8
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	20099.0	0.0	20099.0
	% Fixture	89.5	0.0	89.5
Total	Lumens	22458.8	0.0	22458.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.8	1.0
10°-20°	677.5	3.0
20°-30°	1112.6	5.0
30°-40°	1577.9	7.0
40°-50°	2608.1	11.6
50°-60°	4685.2	20.9
60°-70°	6505.6	29.0
70°-80°	4718.9	21.0
80°-90°	341.2	1.5
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°	22458.8	100.0
0°-180°	22458.8	100.0

Coefficient of Utilization



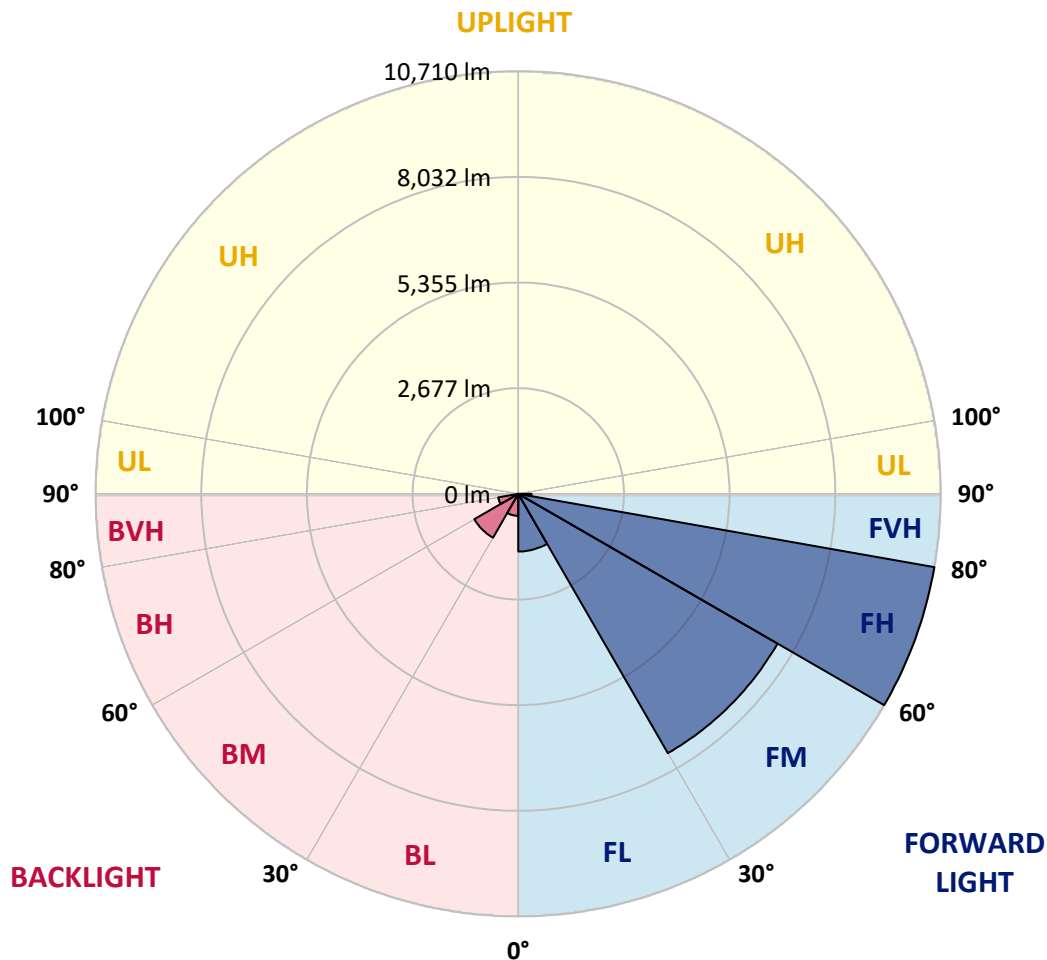
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1463.0	6.5			
FM (30°-60°)	7587.8	33.8			
FH (60°-80°)	10709.9	47.7			G4/12000
FVH (80°-90°)	338.3	1.5			G3/500
BL (0°-30°)	558.9	2.5	B2/1000		
BM (30°-60°)	1283.4	5.7	B2/2500		
BH (60°-80°)	514.6	2.3	B2/1000		G2/1000
BVH (80°-90°)	2.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2460.4	2460.4	2460.4	2460.4	2460.4	2460.4	2460.4	2460.4	2460.4	2460.4	2460.4
2.5°	2687.2	2691.9	2688.8	2670.4	2639.8	2622.9	2613.8	2583.0	2563.1	2527.9	2491.1
5°	2934.1	2952.5	2941.7	2905.0	2846.7	2805.3	2793.0	2730.2	2673.5	2607.6	2530.9
7.5°	3196.3	3205.4	3185.5	3137.9	3059.8	2989.3	2978.5	2891.2	2800.7	2699.5	2595.3
10°	3423.1	3433.9	3403.2	3334.2	3245.3	3157.9	3142.5	3046.0	2938.7	2814.5	2681.2
12.5°	3613.2	3623.9	3584.1	3501.3	3403.2	3312.7	3297.4	3196.3	3078.2	2940.2	2774.7
15°	3757.3	3777.2	3723.5	3634.6	3528.9	3438.5	3430.8	3331.1	3216.1	3062.9	2886.6
17.5°	3841.6	3861.6	3811.0	3703.6	3613.2	3536.6	3527.3	3444.6	3337.3	3190.1	2995.5
20°	3855.4	3873.8	3820.2	3726.6	3651.6	3590.2	3585.6	3525.8	3447.6	3306.6	3113.4
22.5°	3814.0	3837.0	3788.0	3712.9	3660.7	3628.5	3622.4	3588.6	3544.2	3424.6	3223.8
25°	3771.1	3789.5	3752.7	3686.8	3659.1	3656.1	3660.7	3654.5	3645.4	3544.2	3352.6
27.5°	3768.0	3788.0	3746.6	3683.7	3668.4	3700.6	3705.2	3734.3	3742.0	3653.1	3476.8
30°	3794.0	3807.9	3768.0	3702.1	3694.4	3768.0	3769.5	3821.7	3833.9	3745.0	3599.4
32.5°	3850.8	3866.1	3826.3	3729.7	3719.0	3821.7	3826.3	3895.3	3915.2	3843.1	3728.1
35°	3984.2	4002.5	3956.6	3806.3	3768.0	3872.2	3886.1	3967.3	4007.1	3947.4	3861.6
37.5°	4316.8	4263.2	4200.3	3961.2	3879.9	3952.0	3975.0	4070.0	4140.5	4071.5	4021.0
40°	5143.1	4974.4	4778.2	4224.8	4076.1	4122.1	4140.5	4235.6	4332.2	4264.7	4240.2
42.5°	6383.3	6183.9	5868.2	4832.0	4372.0	4395.0	4408.8	4491.5	4628.0	4574.4	4580.5
45°	7488.5	7416.5	7094.5	5868.2	4925.4	4812.0	4828.9	4871.7	5072.6	5052.6	5092.5
47.5°	8337.8	8296.3	8048.1	7057.7	5860.5	5322.4	5370.0	5389.9	5679.6	5750.1	5857.5
50°	8990.8	8975.5	8753.2	8115.5	7082.3	6075.2	6092.0	6049.0	6482.9	6657.7	6861.6
52.5°	9607.1	9659.2	9495.2	9098.1	8386.9	7060.8	7057.7	6855.4	7441.0	7704.7	8052.7
55°	10163.6	10181.9	10198.9	10100.7	9699.1	8183.0	8153.9	7822.7	8552.4	8825.2	9202.3
57.5°	10686.2	10693.9	10844.2	11045.0	11065.0	9387.9	9334.3	8937.2	9766.5	9961.2	10192.7
60°	11037.3	11072.6	11389.9	11947.9	12191.7	10631.1	10602.0	10197.3	11002.0	11092.6	11049.6
62.5°	10531.5	10746.1	11546.3	12653.1	13255.5	12009.2	11995.5	11615.3	12302.0	12228.5	11860.6
65°	8524.8	8888.1	10295.4	13129.8	14299.5	13548.3	13568.2	13163.6	13637.2	13398.1	12519.8
67.5°	5963.2	6346.5	8011.3	13168.2	15466.0	15355.7	15470.6	14836.1	15055.2	14518.7	12676.1
70°	4123.7	4321.4	5405.2	12343.5	16375.1	17845.2	17842.2	16890.2	16465.6	15029.2	11878.9
72.5°	2773.1	2875.8	3510.5	9792.5	15706.8	19324.5	19235.7	18459.9	16940.8	14055.7	9705.2
75°	1169.6	1244.8	1624.9	5503.3	12426.2	17679.7	17439.0	16313.8	15052.1	11067.9	6055.2
77.5°	370.9	403.1	640.8	1969.8	6844.6	13289.2	13034.8	10188.1	10088.5	5552.4	2213.6
80°	176.3	205.4	360.3	791.0	2693.4	7227.9	7192.6	4621.9	4339.8	1499.3	444.5
82.5°	76.7	90.4	199.3	423.1	1204.9	2578.5	2630.6	1572.9	1301.4	568.8	136.4
85°	24.5	32.2	91.9	194.6	508.9	640.8	633.1	374.0	524.3	309.7	47.6
87.5°	0.0	0.0	30.6	44.5	52.1	36.8	41.4	32.2	145.7	85.9	16.9
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°	2460.4	2460.4	2460.4	2460.4	2460.4	2460.4	2460.4	2460.4	2460.4	2460.4	2460.4
2.5°	2472.7	2448.1	2405.3	2365.4	2330.1	2294.9	2273.3	2242.7	2239.6	2239.6	2247.3
5°	2489.5	2449.6	2373.0	2291.8	2198.3	2109.3	2020.5	1934.6	1907.0	1887.1	1896.2
7.5°	2538.6	2475.8	2354.6	2199.8	2022.0	1827.3	1690.8	1543.6	1487.0	1456.3	1460.9
10°	2609.1	2523.2	2339.3	2067.9	1779.8	1514.5	1319.9	1160.4	1099.1	1073.1	1073.1
12.5°	2687.2	2581.5	2311.7	1903.9	1514.5	1197.2	1007.2	933.6	924.3	924.3	924.3
15°	2780.8	2652.0	2264.2	1710.8	1237.1	947.4	880.0	883.0	892.2	898.3	898.3
17.5°	2877.4	2727.1	2189.1	1494.7	991.8	852.3	853.8	858.4	866.1	872.3	872.3
20°	2981.6	2802.2	2089.5	1264.6	850.7	824.7	829.3	833.9	840.1	843.2	844.7
22.5°	3093.6	2872.8	1971.4	1039.4	803.3	801.8	803.3	807.9	815.5	815.5	818.6
25°	3213.1	2951.0	1836.5	875.4	778.8	778.8	781.8	784.8	791.0	791.0	792.5
27.5°	3335.8	3023.0	1693.9	789.5	757.3	755.7	755.7	760.3	763.4	765.0	766.5
30°	3470.6	3107.3	1551.3	771.1	740.5	732.8	728.2	731.2	734.3	735.8	738.9
32.5°	3608.6	3188.6	1424.1	778.8	723.5	709.8	694.4	691.4	691.4	697.5	702.1
35°	3761.9	3277.4	1326.0	804.8	714.3	676.0	651.5	637.8	639.3	648.4	653.0
37.5°	3945.8	3384.8	1254.0	827.8	708.3	637.8	597.9	581.0	570.3	581.0	577.9
40°	4186.5	3542.7	1201.8	846.2	700.6	593.3	539.6	512.0	492.1	498.3	495.2
42.5°	4540.6	3791.1	1181.9	847.8	683.7	541.1	479.8	443.0	413.9	415.4	409.3
45°	5037.4	4183.4	1284.6	827.8	646.9	484.4	417.0	367.9	349.5	344.9	338.8
47.5°	5718.0	4755.3	1522.2	786.4	593.3	429.3	355.7	314.3	300.4	292.8	288.2
50°	6630.1	5489.6	1785.9	740.5	539.6	377.1	305.0	279.0	269.8	262.1	260.6
52.5°	7687.8	6234.6	2002.0	694.4	486.0	331.1	272.9	257.6	249.9	243.7	242.2
55°	8658.2	6748.1	1989.8	645.3	433.8	294.4	249.9	240.7	231.4	225.3	222.3
57.5°	9262.2	6820.1	1640.3	591.7	374.0	265.2	228.4	222.3	211.6	203.9	202.3
60°	9539.7	6409.3	1149.7	521.2	314.3	237.6	205.4	202.3	188.6	177.8	174.8
62.5°	9590.2	5645.9	766.5	433.8	262.1	211.6	182.4	177.8	159.4	141.0	131.8
65°	9384.8	4554.5	530.4	338.8	223.9	184.0	156.3	147.2	127.2	108.9	102.7
67.5°	8734.8	3197.8	369.4	243.7	190.1	145.7	124.1	121.2	105.8	90.4	85.9
70°	7543.7	1822.7	246.8	182.4	150.3	99.6	98.1	101.2	85.9	73.6	67.4
72.5°	5783.9	833.9	153.3	133.4	102.7	67.4	78.2	79.7	65.9	55.1	49.1
75°	3404.7	357.2	96.6	85.9	52.1	44.5	56.7	58.2	44.5	35.3	30.6
77.5°	1159.0	134.9	61.3	50.6	26.0	24.5	36.8	36.8	24.5	13.8	10.8
80°	263.6	50.6	30.6	19.9	12.3	10.8	12.3	10.8	6.1	1.5	0.0
82.5°	75.1	19.9	12.3	7.7	4.6	4.6	1.5	0.0	0.0	0.0	0.0
85°	21.4	9.2	3.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.2	1.5	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)