

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: P967637

Luminaire Tested: **NAV-SB5A-722-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967637
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-722-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16245.2 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

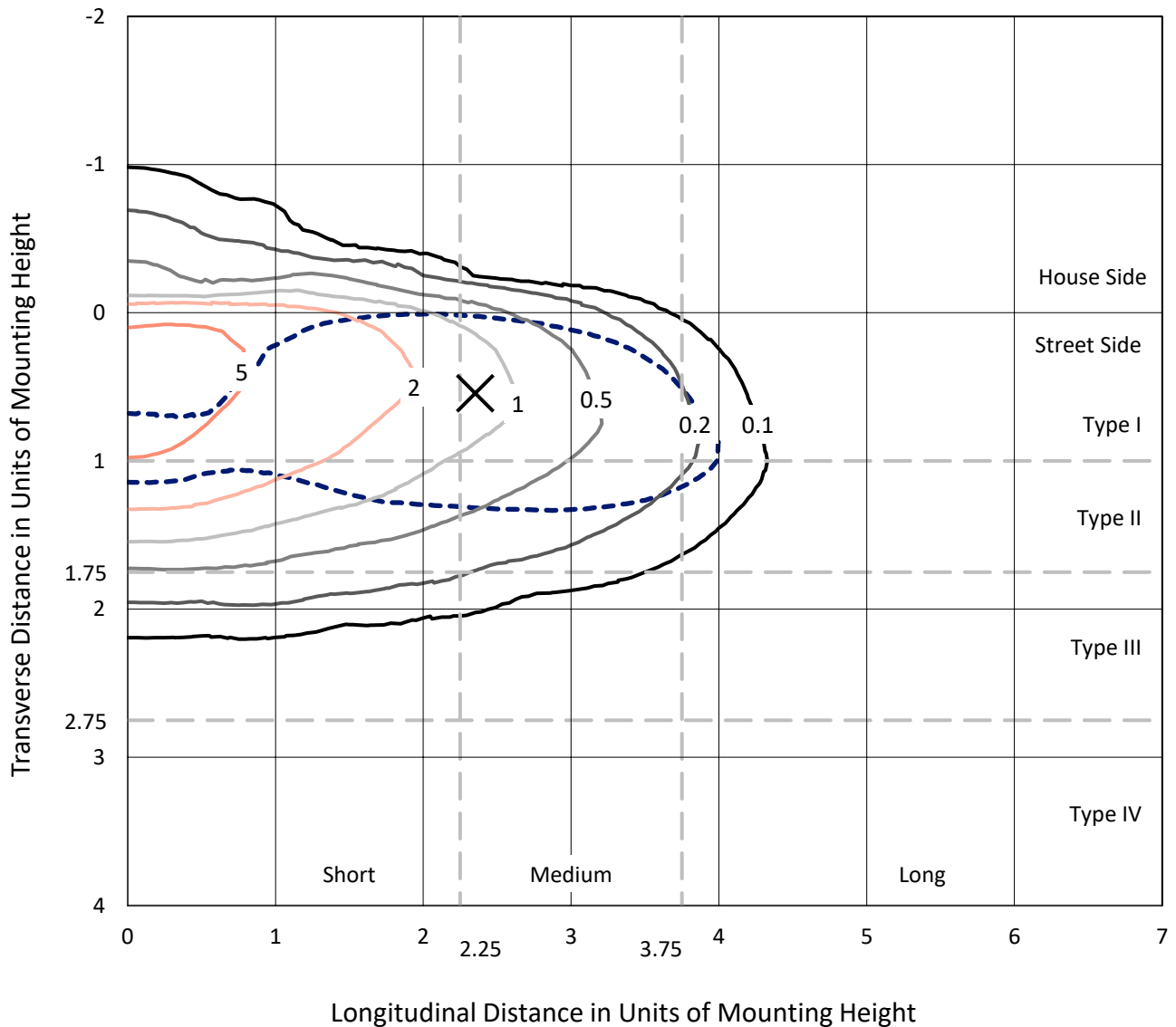
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P967637
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Iso-Footcandle Lines of Horizontal Illumination

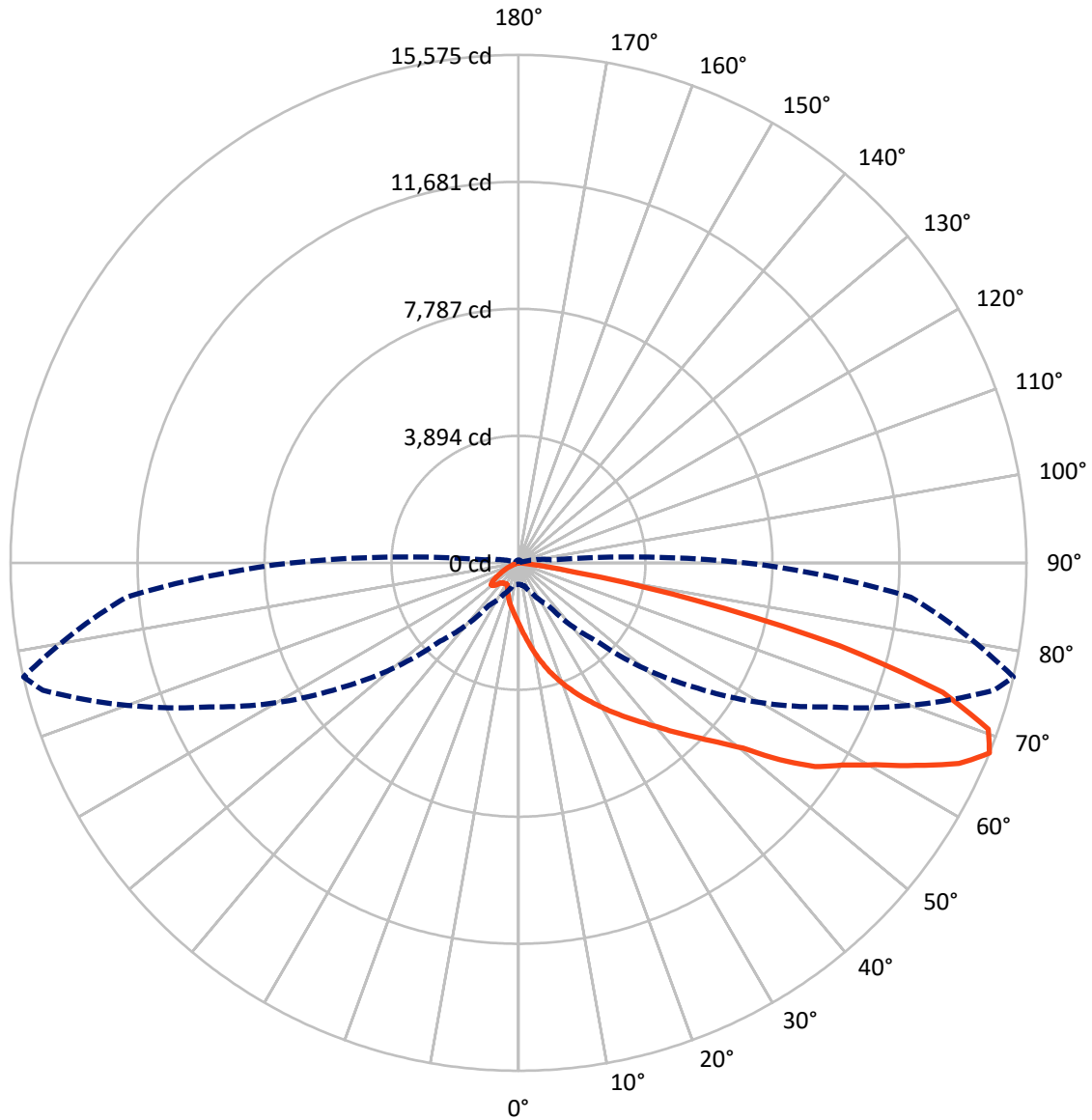
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 fc
 Type II - Medium - N/A

REPORT NUMBER: P967637
CATALOG NUMBER: NAV-SB5A-722-U-T2R-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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 CATALOG NUMBER: NAV-SB5A-722-U-T2R-HSS

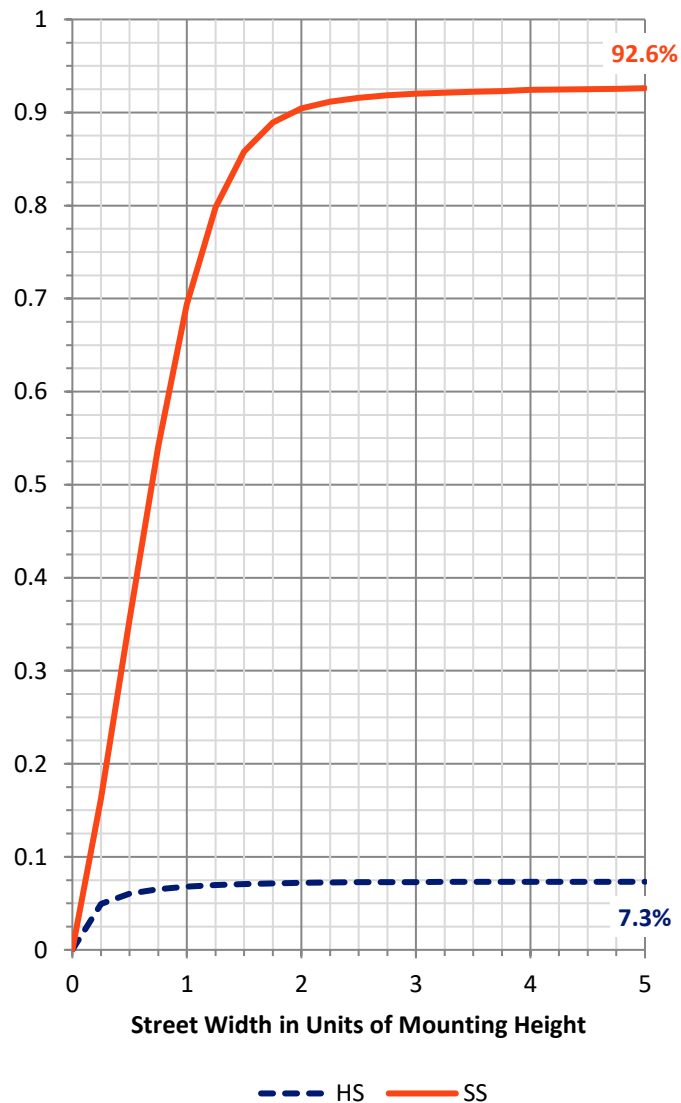
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1195.2	0.0	1195.2
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	15050.1	0.0	15050.1
	% Fixture	92.6	0.0	92.6
Total	Lumens	16245.2	0.0	16245.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.2	1.2
10°-20°	669.6	4.1
20°-30°	1292.1	8.0
30°-40°	2243.1	13.8
40°-50°	3256.9	20.0
50°-60°	3740.1	23.0
60°-70°	3247.1	20.0
70°-80°	1529.4	9.4
80°-90°	75.6	0.5
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°	16245.2	100.0
0°-180°	16245.2	100.0

Coefficient of Utilization

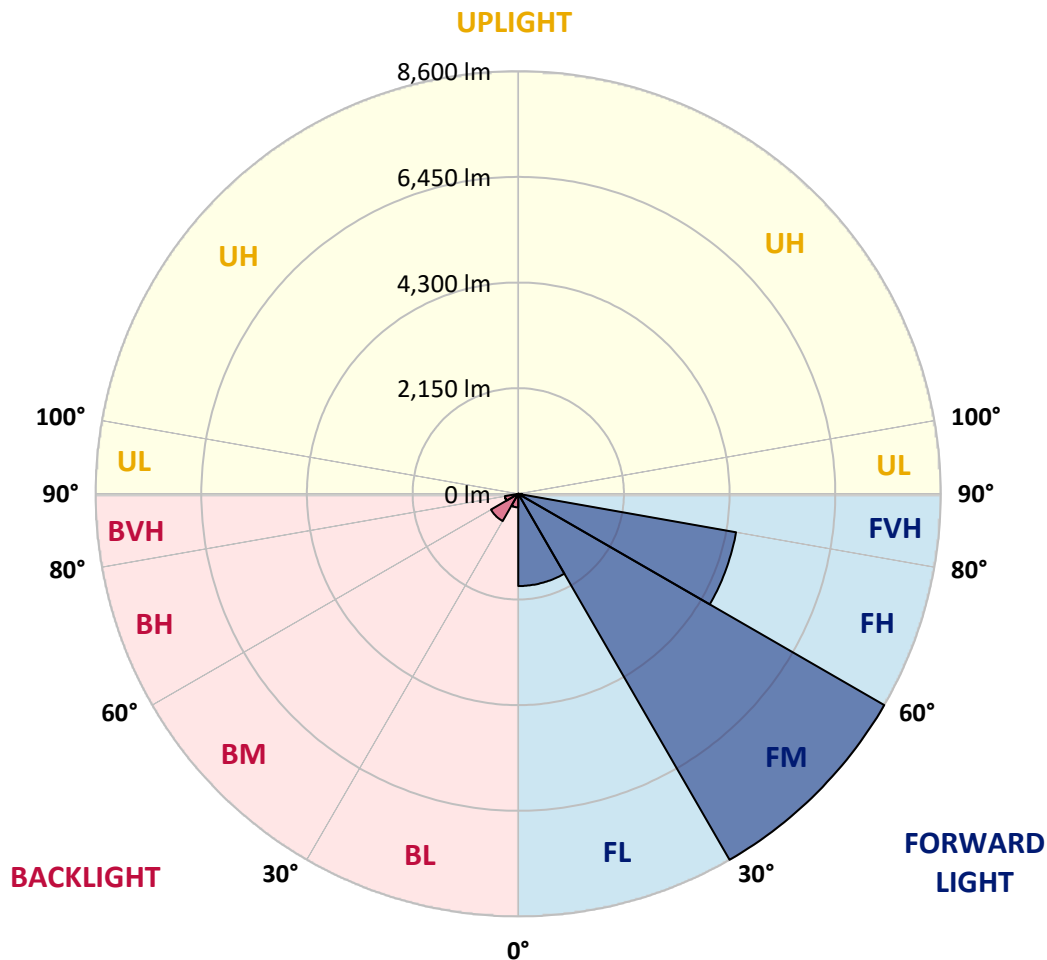


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 CATALOG NUMBER: NAV-SB5A-722-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1876.1	11.5			
FM (30°-60°)	8599.8	52.9			
FH (60°-80°)	4499.9	27.7			G2/5000
FVH (80°-90°)	74.2	0.5			G1/100
BL (0°-30°)	276.7	1.7	B1/500		
BM (30°-60°)	640.4	3.9	B1/1000		
BH (60°-80°)	276.7	1.7	B1/500		G1/500
BVH (80°-90°)	1.4	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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1873.3	1873.3	1873.3	1873.3	1873.3	1873.3	1873.3	1873.3	1873.3	1873.3	1873.3
2.5°	2593.6	2609.8	2586.5	2542.1	2475.6	2432.2	2326.2	2226.4	2115.4	2080.1	1969.1
5°	3161.5	3175.7	3149.4	3101.0	3012.3	2927.5	2788.3	2579.4	2362.6	2292.9	2096.2
7.5°	3582.2	3590.3	3580.2	3535.8	3451.1	3355.2	3199.8	2952.7	2630.9	2554.2	2252.6
10°	3884.9	3911.1	3908.0	3890.9	3834.4	3756.7	3591.3	3309.8	2931.5	2832.7	2429.1
12.5°	4085.5	4114.9	4132.0	4170.3	4167.2	4117.8	3972.6	3675.0	3231.1	3115.1	2627.9
15°	4144.1	4175.3	4240.9	4329.7	4408.4	4433.6	4331.8	4033.2	3561.1	3412.7	2831.7
17.5°	4110.8	4159.2	4237.9	4378.1	4550.6	4664.6	4653.5	4379.1	3860.7	3691.1	3031.4
20°	4184.5	4230.9	4292.4	4410.4	4611.2	4817.9	4900.6	4710.0	4158.2	3980.7	3241.3
22.5°	4592.0	4583.9	4590.0	4609.1	4729.1	4933.9	5104.5	5010.6	4452.8	4271.2	3463.2
25°	5237.6	5201.3	5139.8	5035.8	5005.6	5104.5	5282.0	5276.9	4763.5	4568.8	3690.1
27.5°	5978.1	5972.0	5827.7	5577.5	5436.3	5398.0	5482.7	5536.2	5071.2	4863.3	3918.2
30°	6687.2	6703.4	6508.6	6230.3	5971.0	5820.7	5744.0	5782.3	5383.9	5181.1	4153.2
32.5°	7304.6	7321.8	7109.9	6784.1	6463.2	6281.7	6120.3	6025.5	5724.8	5503.9	4411.4
35°	7826.2	7843.3	7600.2	7240.1	6898.0	6733.6	6551.1	6291.8	6067.8	5862.1	4698.9
37.5°	8292.2	8287.1	7961.4	7598.1	7262.2	7132.2	7036.3	6619.7	6420.9	6222.2	5017.7
40°	8567.6	8588.8	8310.4	7909.9	7584.1	7489.3	7483.1	7026.2	6828.4	6635.7	5366.7
42.5°	8648.3	8685.6	8483.9	8155.0	7859.4	7756.6	7914.9	7466.0	7302.6	7114.9	5761.2
45°	8503.1	8539.4	8447.5	8219.6	8047.1	7980.4	8286.2	7922.0	7809.0	7623.3	6206.1
47.5°	8079.4	8124.8	8146.9	8098.5	8096.5	8164.1	8619.0	8402.1	8410.2	8220.6	6721.5
50°	7259.3	7335.9	7539.7	7711.2	7976.4	8309.4	8942.9	8922.7	9088.2	8924.7	7393.4
52.5°	5768.2	5877.1	6579.3	7048.4	7644.6	8282.1	9299.0	9758.0	10277.5	10038.4	8340.6
55°	4635.4	4635.4	5206.4	6084.0	6997.0	8102.5	9454.3	10300.7	11087.5	11031.0	9007.4
57.5°	3778.9	3824.3	4188.5	4964.3	6059.8	7674.8	9550.1	10641.7	11740.2	11698.8	9659.1
60°	2332.3	2430.2	3118.2	3883.8	4993.5	6913.2	9489.7	10986.7	12532.2	12565.4	10443.9
62.5°	1313.4	1349.7	1656.4	2794.4	3882.8	5889.2	9026.6	11179.4	13545.0	13686.2	11253.0
65°	906.9	925.1	1043.0	1739.1	2691.4	4688.9	8121.7	11059.3	14559.8	14845.3	11939.0
67.5°	658.8	667.8	741.5	1062.2	1596.9	3399.6	6703.4	10454.1	15097.4	15574.7	12070.1
70°	506.5	512.5	565.9	698.1	943.2	2098.3	4868.4	9250.5	14708.0	15278.0	11398.3
72.5°	411.5	417.7	459.0	516.5	625.5	1240.8	2950.7	7512.4	12989.1	13604.5	9703.5
75°	347.1	355.1	392.4	429.8	490.3	796.9	1384.1	5231.6	9768.0	10171.6	6747.8
77.5°	192.7	177.5	318.8	356.1	413.6	504.4	647.6	3078.8	5470.6	5582.7	2994.0
80°	120.0	124.1	253.2	286.5	317.8	254.2	296.5	1185.3	1896.6	1801.6	580.0
82.5°	7.1	16.1	194.6	206.8	217.9	109.0	111.9	402.5	456.9	419.6	102.9
85°	0.0	0.0	88.8	71.6	75.6	31.3	32.3	93.8	61.5	66.6	20.2
87.5°	0.0	0.0	0.0	2.0	0.0	3.1	6.0	8.1	3.1	4.0	7.1
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°	1873.3	1873.3	1873.3	1873.3	1873.3	1873.3	1873.3	1873.3	1873.3	1873.3	1873.3
2.5°	1898.5	1827.9	1684.7	1544.5	1430.5	1324.5	1248.9	1177.2	1140.9	1138.9	1136.9
5°	1956.0	1807.8	1521.2	1268.0	1064.3	900.9	794.9	719.2	680.9	667.8	665.8
7.5°	2036.8	1813.8	1378.0	1025.9	785.9	645.6	585.1	560.9	552.8	543.8	541.7
10°	2138.7	1827.9	1249.9	826.2	619.4	548.8	524.6	514.4	508.4	502.4	500.4
12.5°	2252.6	1841.0	1122.8	685.9	544.8	508.4	491.3	479.2	471.1	464.0	462.1
15°	2363.5	1849.1	990.7	588.1	506.5	477.1	459.0	445.9	434.8	426.7	425.7
17.5°	2473.5	1860.2	866.5	529.6	475.1	445.9	427.7	411.5	402.5	393.4	392.4
20°	2595.6	1858.2	749.5	488.2	443.8	414.6	395.4	380.3	371.3	361.1	360.2
22.5°	2708.6	1848.1	646.7	452.9	411.5	383.3	362.1	347.1	337.9	329.8	328.8
25°	2838.7	1840.0	560.9	420.7	381.3	353.1	329.8	315.7	305.7	298.6	297.6
27.5°	2963.8	1827.9	498.4	391.4	352.1	324.8	302.7	286.5	277.4	272.3	272.3
30°	3086.9	1824.9	475.1	363.2	325.8	298.6	276.4	261.3	254.2	252.2	251.2
32.5°	3235.2	1833.0	485.2	353.1	301.7	274.4	253.2	242.1	235.0	235.0	235.0
35°	3393.6	1831.0	500.4	362.1	285.5	250.2	234.0	226.9	220.0	220.0	220.0
37.5°	3592.3	1833.9	512.5	377.3	279.4	230.0	220.9	211.9	207.8	207.8	207.8
40°	3888.8	1933.9	506.5	390.4	277.4	215.9	197.7	194.6	191.7	191.7	191.7
42.5°	4252.0	2150.8	514.4	391.4	276.4	205.8	181.6	187.7	180.6	179.6	178.6
45°	4649.5	2387.8	565.9	370.2	275.4	200.8	173.5	180.6	169.4	169.4	169.4
47.5°	5043.9	2622.9	618.4	340.0	272.3	199.8	166.5	162.5	159.4	160.4	160.4
50°	5587.7	2814.5	638.6	298.6	265.3	197.7	153.3	154.4	152.3	154.4	154.4
52.5°	6179.8	2854.8	614.4	252.2	245.2	191.7	144.2	148.3	147.3	149.3	149.3
55°	6549.0	2811.5	507.4	209.8	213.8	167.5	135.2	143.3	143.3	143.3	143.3
57.5°	6930.3	2626.9	360.2	170.5	177.5	137.1	127.1	138.2	137.1	136.2	136.2
60°	7204.7	2328.3	237.1	140.2	141.2	113.0	118.0	130.2	129.1	124.1	124.1
62.5°	7409.5	1998.4	152.3	119.0	107.9	101.9	107.9	118.0	114.0	102.9	100.9
65°	7386.4	1541.4	117.1	101.9	88.8	88.8	93.8	102.9	90.8	72.7	70.6
67.5°	6955.5	1043.0	96.9	85.8	74.6	73.6	77.7	85.8	77.7	61.5	59.6
70°	6185.9	681.9	77.7	66.6	59.6	54.4	62.5	73.6	65.6	49.4	47.5
72.5°	5020.8	415.6	58.5	48.4	43.4	35.3	49.4	60.6	52.5	36.3	34.3
75°	3248.3	211.9	40.4	31.3	23.2	21.2	36.3	45.4	36.3	22.2	19.2
77.5°	1242.8	88.8	22.2	14.1	12.1	10.0	20.2	27.3	15.2	5.0	4.0
80°	239.1	37.3	11.1	7.1	6.0	4.0	3.1	2.0	0.0	0.0	0.0
82.5°	41.4	12.1	4.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.0	0.0	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)