

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: P966056

Luminaire Tested: **NAV-SB4B-722-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966056
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-SB4B-722-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2200K, 450mA 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: 16179.6 lumens
Efficiency: N/A
Efficacy: 110.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

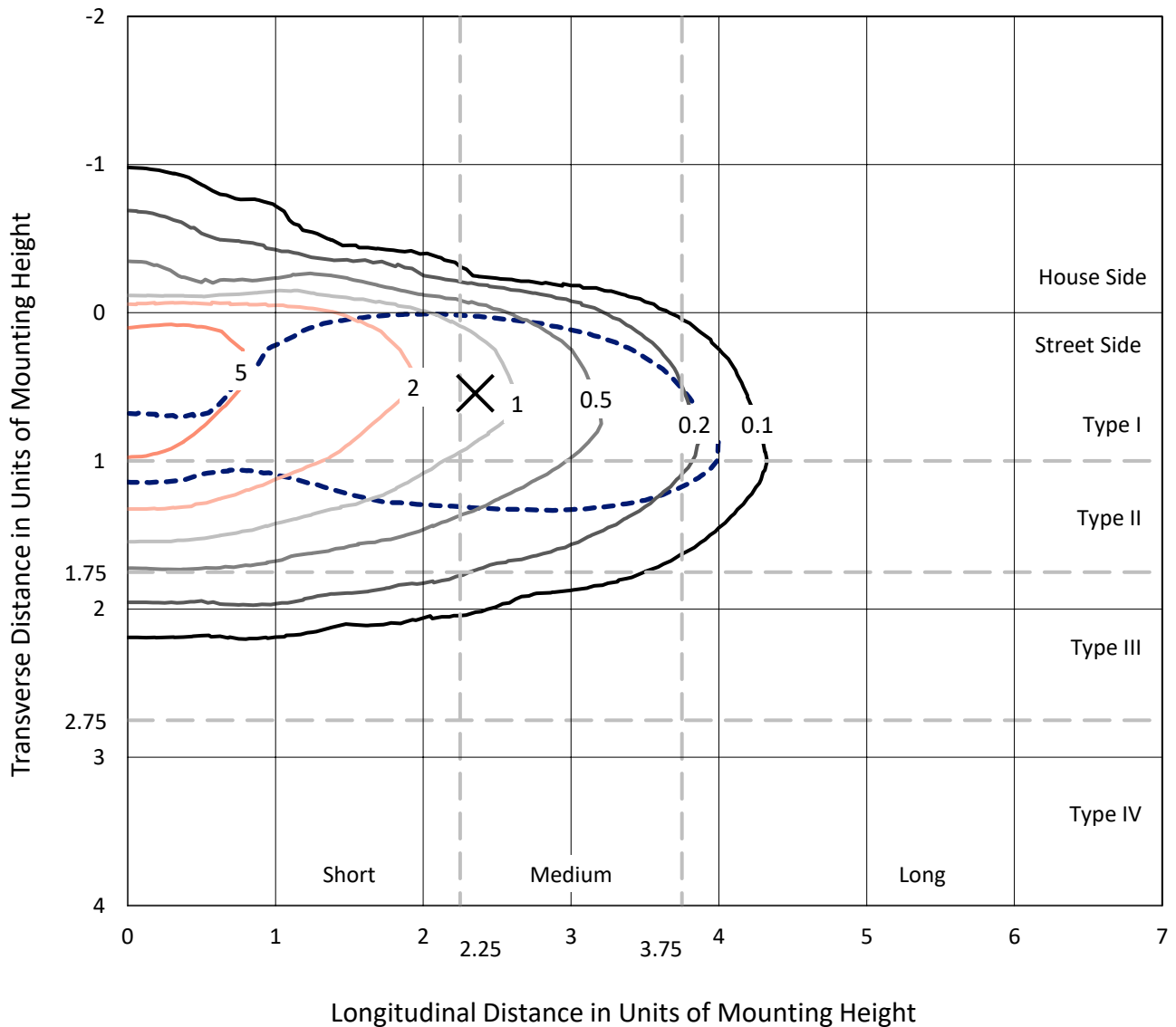
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

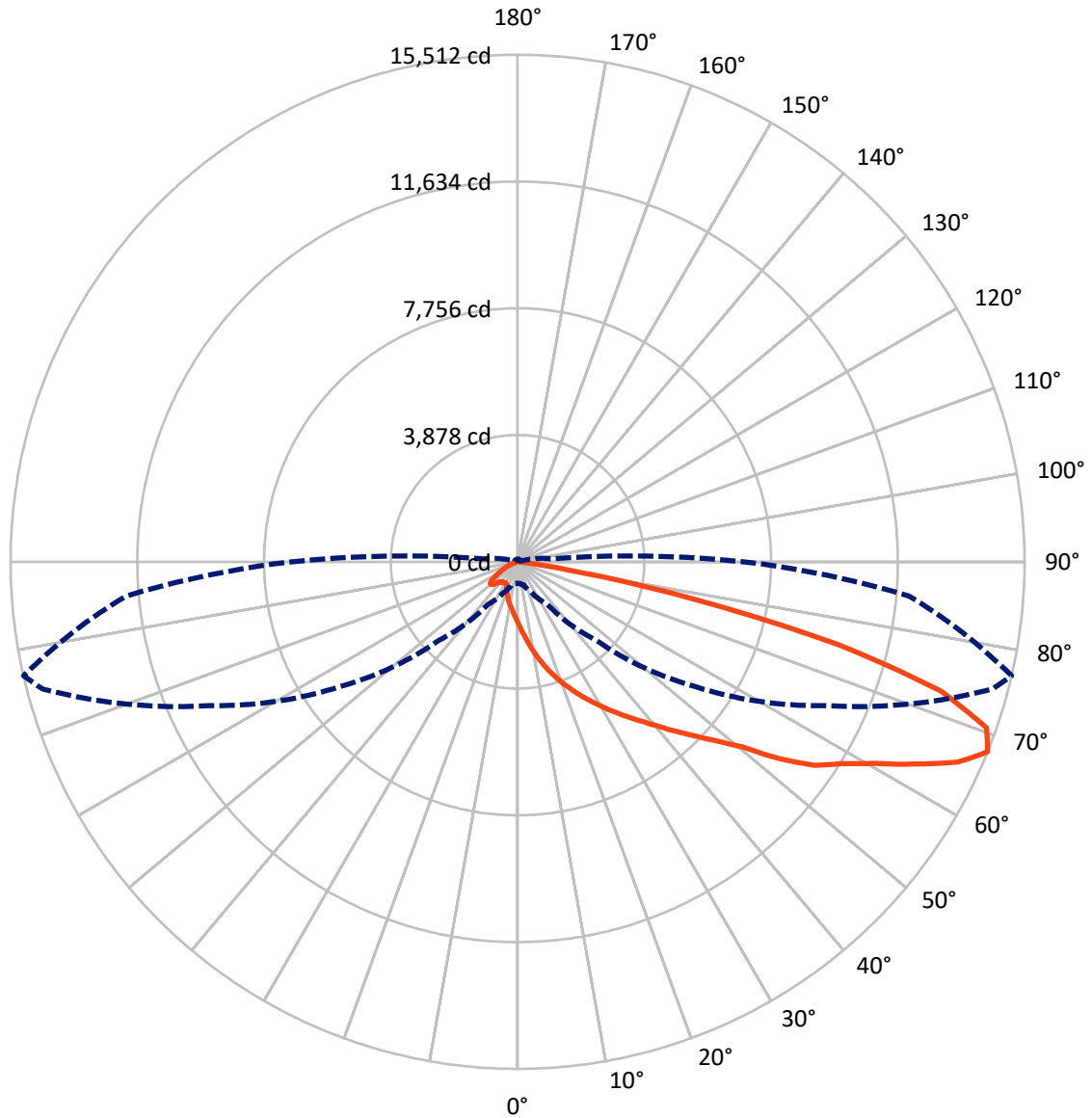
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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

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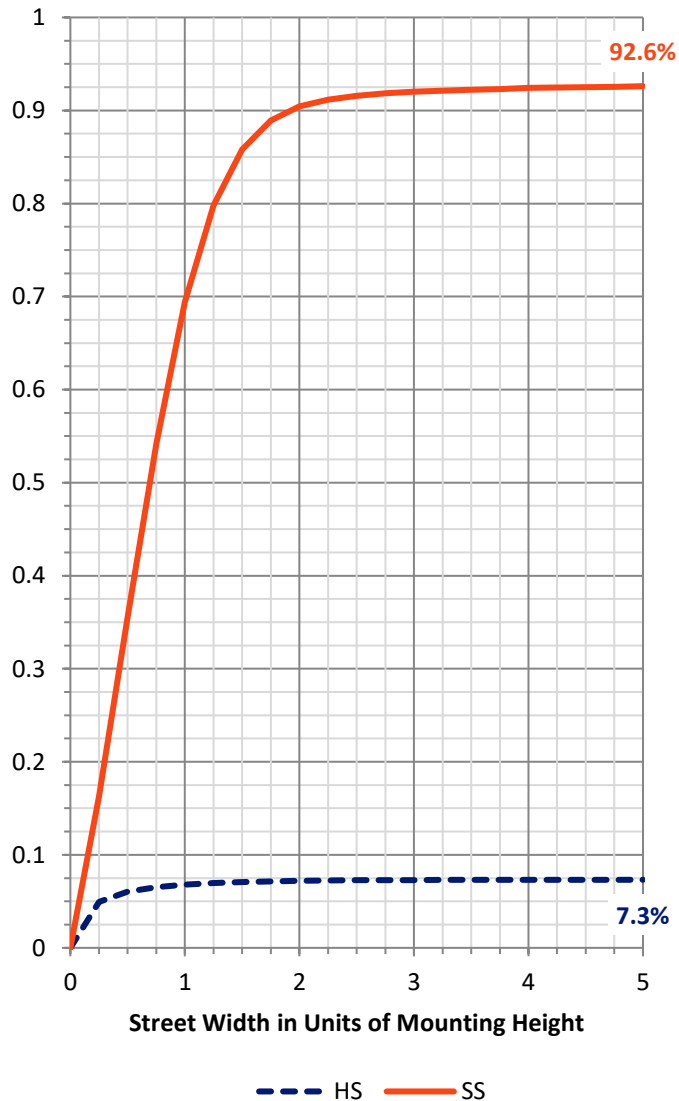
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1190.4	0.0	1190.4
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	14989.3	0.0	14989.3
	% Fixture	92.6	0.0	92.6
Total	Lumens	16179.6	0.0	16179.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.4	1.2
10°-20°	666.9	4.1
20°-30°	1286.9	8.0
30°-40°	2234.1	13.8
40°-50°	3243.8	20.0
50°-60°	3725.0	23.0
60°-70°	3234.0	20.0
70°-80°	1523.3	9.4
80°-90°	75.3	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°	16179.6	100.0
0°-180°	16179.6	100.0

Coefficient of Utilization

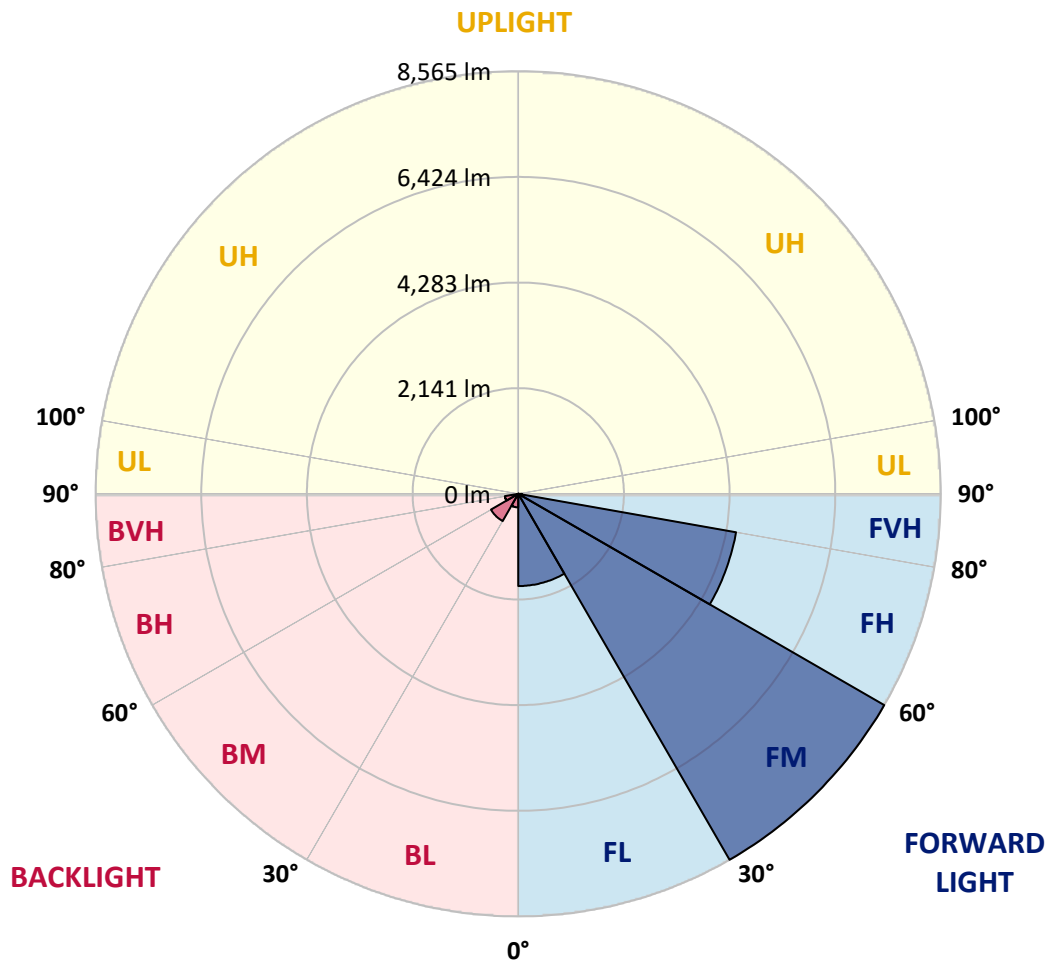


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1868.6	11.5			
FM (30°-60°)	8565.1	52.9			
FH (60°-80°)	4481.7	27.7			G2/5000
FVH (80°-90°)	73.9	0.5			G1/100
BL (0°-30°)	275.6	1.7	B1/500		
BM (30°-60°)	637.8	3.9	B1/1000		
BH (60°-80°)	275.6	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°	1865.7	1865.7	1865.7	1865.7	1865.7	1865.7	1865.7	1865.7	1865.7	1865.7	1865.7
2.5°	2583.1	2599.2	2576.0	2531.9	2465.5	2422.4	2316.9	2217.4	2106.9	2071.7	1961.2
5°	3148.8	3162.8	3136.7	3088.5	3000.1	2915.7	2777.0	2569.1	2353.0	2283.7	2087.8
7.5°	3567.7	3575.8	3565.8	3521.5	3437.1	3341.7	3186.9	2940.8	2620.3	2543.9	2243.5
10°	3869.2	3895.3	3892.2	3875.2	3818.9	3741.6	3576.7	3296.5	2919.7	2821.2	2419.3
12.5°	4069.0	4098.3	4115.3	4153.5	4150.4	4101.2	3956.6	3660.2	3218.1	3102.6	2617.2
15°	4127.4	4158.5	4223.8	4312.2	4390.6	4415.7	4314.2	4016.9	3546.6	3398.9	2820.2
17.5°	4094.2	4142.4	4220.7	4360.5	4532.2	4645.8	4634.7	4361.5	3845.0	3676.3	3019.1
20°	4167.5	4213.8	4275.1	4392.6	4592.5	4798.5	4880.8	4691.0	4141.4	3964.6	3228.1
22.5°	4573.4	4565.5	4571.4	4590.6	4710.1	4914.1	5083.8	4990.4	4434.8	4254.0	3449.1
25°	5216.4	5180.2	5119.0	5015.5	4985.4	5083.8	5260.7	5255.7	4744.2	4550.4	3675.2
27.5°	5953.9	5947.9	5804.3	5555.1	5414.4	5376.2	5460.6	5513.9	5050.7	4843.7	3902.3
30°	6660.2	6676.3	6482.4	6205.1	5946.8	5797.2	5720.8	5759.0	5362.2	5160.2	4136.4
32.5°	7275.1	7292.2	7081.2	6756.7	6437.2	6256.3	6095.6	6001.2	5701.8	5481.7	4393.6
35°	7794.5	7811.6	7569.5	7210.8	6870.2	6706.5	6524.6	6266.3	6043.3	5838.4	4679.9
37.5°	8258.7	8253.7	7929.2	7567.5	7232.9	7103.4	7007.8	6592.9	6395.0	6197.0	4997.4
40°	8533.0	8554.1	8276.8	7877.9	7553.4	7458.9	7453.0	6997.8	6800.9	6609.0	5345.1
42.5°	8613.4	8650.6	8449.6	8122.1	7827.7	7725.2	7883.0	7435.9	7273.1	7086.2	5738.0
45°	8468.8	8504.8	8413.4	8186.4	8014.6	7948.3	8252.7	7890.0	7777.5	7592.6	6181.0
47.5°	8046.8	8092.0	8114.0	8065.8	8063.8	8131.1	8584.3	8368.2	8376.3	8187.4	6694.4
50°	7229.9	7306.3	7509.3	7680.0	7944.3	8275.8	8906.7	8886.6	9051.5	8888.7	7363.5
52.5°	5744.9	5853.5	6552.7	7019.9	7613.7	8248.7	9261.4	9718.5	10236.0	9997.8	8306.9
55°	4616.6	4616.6	5185.3	6059.4	6968.7	8069.8	9416.2	10259.1	11042.7	10986.6	8971.1
57.5°	3763.7	3808.9	4171.5	4944.2	6035.3	7643.8	9511.6	10598.7	11692.8	11651.6	9620.1
60°	2322.9	2420.3	3105.5	3868.1	4973.3	6885.3	9451.3	10942.3	12481.5	12514.6	10401.8
62.5°	1308.1	1344.3	1649.7	2783.1	3867.1	5865.5	8990.2	11134.2	13490.2	13631.0	11207.6
65°	903.2	921.3	1038.8	1732.1	2680.6	4669.9	8088.9	11014.6	14501.0	14785.3	11890.7
67.5°	656.1	665.1	738.5	1058.0	1590.5	3385.9	6676.3	10411.8	15036.5	15511.7	12021.4
70°	504.4	510.3	563.6	695.3	939.4	2089.8	4848.8	9213.2	14648.7	15216.3	11352.2
72.5°	409.9	415.9	457.2	514.4	622.9	1235.8	2938.8	7482.1	12936.6	13549.6	9664.3
75°	345.6	353.6	390.8	428.0	488.3	793.8	1378.4	5210.4	9728.6	10130.5	6720.5
77.5°	191.9	176.8	317.4	354.6	411.9	502.4	645.0	3066.4	5448.6	5560.1	2982.0
80°	119.5	123.6	252.2	285.4	316.5	253.2	295.4	1180.5	1888.9	1794.4	577.7
82.5°	7.1	16.1	193.9	205.9	217.0	108.5	111.5	400.9	455.1	418.0	102.5
85°	0.0	0.0	88.5	71.3	75.3	31.2	32.2	93.5	61.3	66.3	20.1
87.5°	0.0	0.0	0.0	2.0	0.0	3.0	6.0	8.0	3.0	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°	1865.7	1865.7	1865.7	1865.7	1865.7	1865.7	1865.7	1865.7	1865.7	1865.7	1865.7
2.5°	1890.8	1820.5	1677.8	1538.2	1424.6	1319.2	1243.8	1172.5	1136.3	1134.4	1132.3
5°	1948.1	1800.4	1515.2	1262.9	1060.0	897.2	791.7	716.4	678.1	665.1	663.1
7.5°	2028.5	1806.5	1372.5	1021.8	782.7	643.0	582.7	558.6	550.6	541.5	539.6
10°	2130.0	1820.5	1244.9	822.9	616.8	546.5	522.4	512.4	506.4	500.3	498.4
12.5°	2243.5	1833.6	1118.3	683.2	542.5	506.4	489.3	477.2	469.2	462.2	460.1
15°	2354.0	1841.6	986.7	585.8	504.4	475.2	457.2	444.1	433.1	425.0	423.9
17.5°	2463.6	1852.7	863.0	527.5	473.2	444.1	426.0	409.9	400.9	391.9	390.8
20°	2585.2	1850.6	746.5	486.3	442.1	413.0	393.8	378.7	369.7	359.7	358.6
22.5°	2697.7	1840.6	644.0	451.1	409.9	381.8	360.7	345.6	336.6	328.5	327.5
25°	2827.3	1832.6	558.6	418.9	379.8	351.7	328.5	314.5	304.4	297.4	296.4
27.5°	2951.8	1820.5	496.3	389.8	350.7	323.5	301.5	285.4	276.3	271.3	271.3
30°	3074.4	1817.5	473.2	361.7	324.5	297.4	275.3	260.2	253.2	251.2	250.2
32.5°	3222.1	1825.5	483.3	351.7	300.4	273.3	252.2	241.1	234.1	234.1	234.1
35°	3379.8	1823.6	498.4	360.7	284.3	249.2	233.1	226.0	219.0	219.0	219.0
37.5°	3577.8	1826.6	510.3	375.8	278.3	229.1	220.1	210.9	206.9	206.9	206.9
40°	3873.2	1926.1	504.4	388.8	276.3	215.0	196.9	193.9	190.9	190.9	190.9
42.5°	4234.9	2142.0	512.4	389.8	275.3	205.0	180.8	186.9	179.9	178.9	177.8
45°	4630.7	2378.1	563.6	368.7	274.3	200.0	172.8	179.9	168.8	168.8	168.8
47.5°	5023.5	2612.2	615.9	338.6	271.3	199.0	165.7	161.7	158.8	159.8	159.8
50°	5565.1	2803.2	636.0	297.4	264.2	196.9	152.7	153.8	151.7	153.8	153.8
52.5°	6154.8	2843.4	611.8	251.2	244.2	190.9	143.7	147.7	146.7	148.7	148.7
55°	6522.6	2800.1	505.3	209.0	213.0	166.8	134.6	142.7	142.7	142.7	142.7
57.5°	6902.4	2616.3	358.6	169.8	176.8	136.6	126.6	137.7	136.6	135.6	135.6
60°	7175.6	2318.9	236.1	139.6	140.6	112.5	117.6	129.6	128.6	123.6	123.6
62.5°	7379.6	1990.3	151.7	118.6	107.5	101.5	107.5	117.6	113.6	102.5	100.4
65°	7356.5	1535.2	116.5	101.5	88.5	88.5	93.5	102.5	90.4	72.4	70.3
67.5°	6927.5	1038.8	96.5	85.4	74.3	73.4	77.4	85.4	77.4	61.3	59.2
70°	6160.9	679.2	77.4	66.3	59.2	54.2	62.3	73.4	65.3	49.2	47.3
72.5°	5000.5	413.9	58.3	48.2	43.2	35.2	49.2	60.3	52.3	36.2	34.1
75°	3235.2	210.9	40.2	31.2	23.1	21.1	36.2	45.2	36.2	22.1	19.1
77.5°	1237.8	88.5	22.1	14.0	12.1	10.0	20.1	27.2	15.1	5.0	4.0
80°	238.1	37.2	11.1	7.1	6.0	4.0	3.0	2.0	0.0	0.0	0.0
82.5°	41.2	12.1	4.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.0	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)