

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: P968170

Luminaire Tested: **NAV-SB5B-722-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968170
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-722-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20052.1 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G4

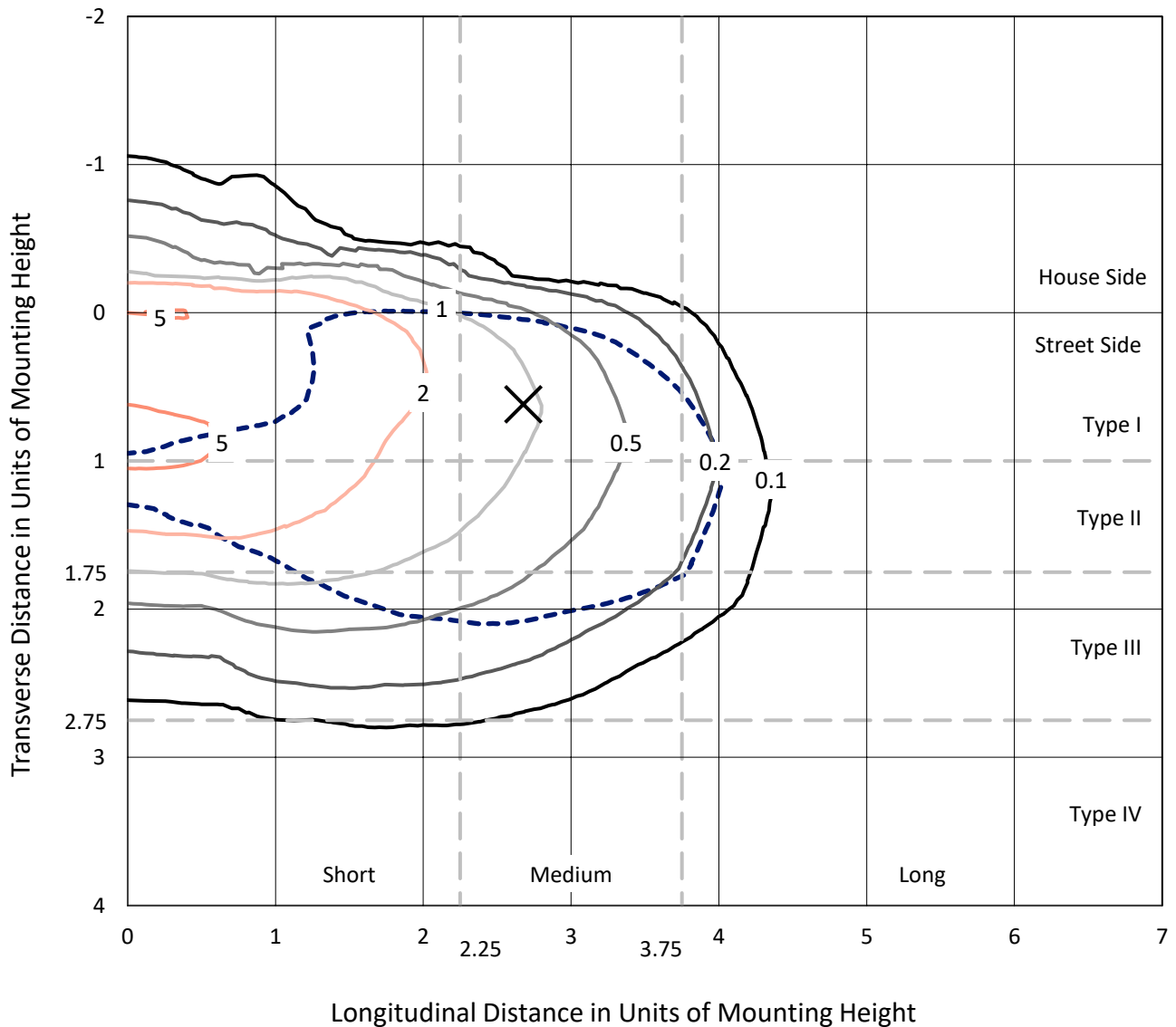
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P968170
 CATALOG NUMBER: NAV-SB5B-722-U-T3R-HSS

Iso-Footcandle Lines of Horizontal Illumination

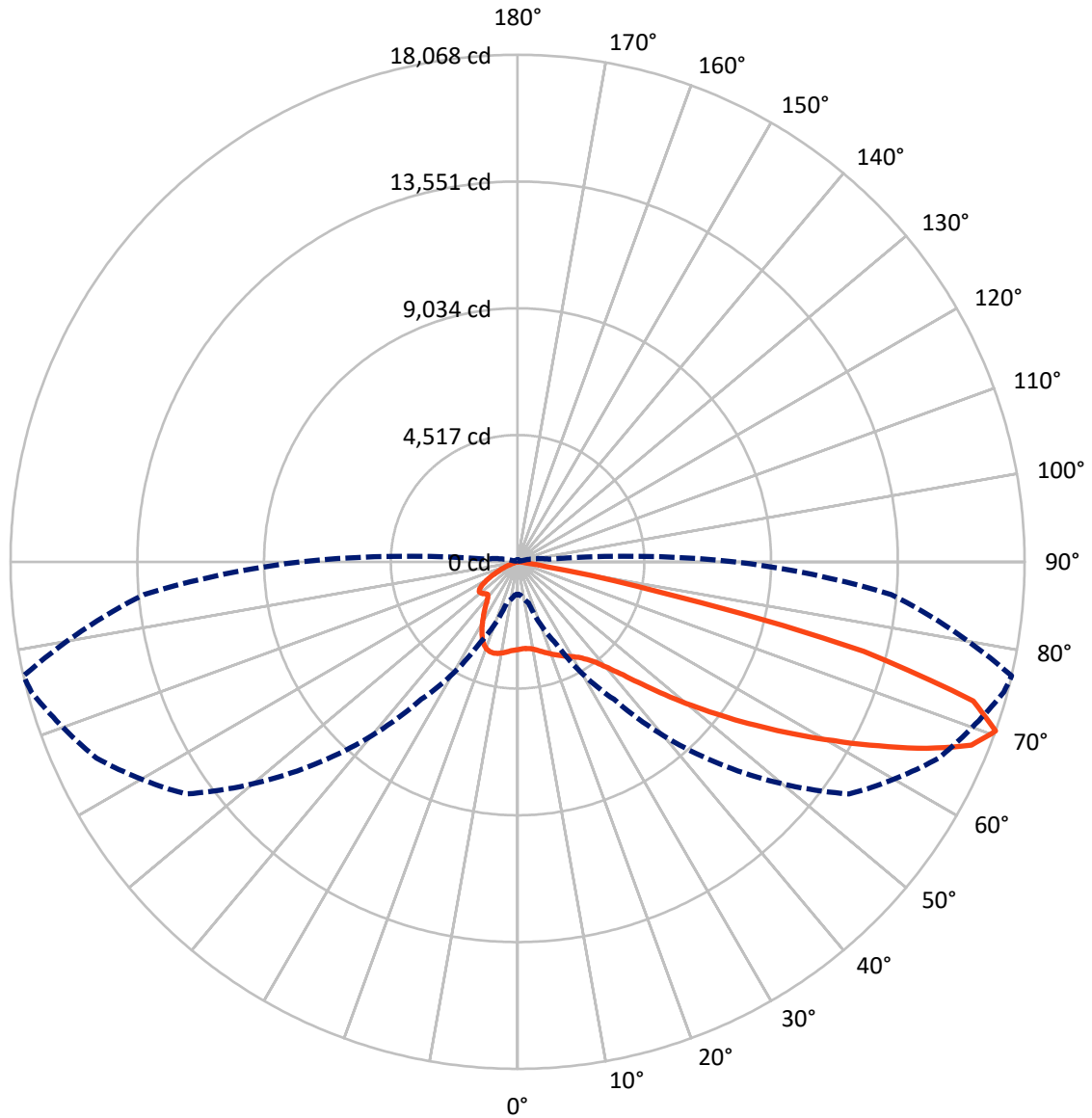
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc
 Type III - Medium - N/A

REPORT NUMBER: P968170
CATALOG NUMBER: NAV-SB5B-722-U-T3R-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P968170
 CATALOG NUMBER: NAV-SB5B-722-U-T3R-HSS

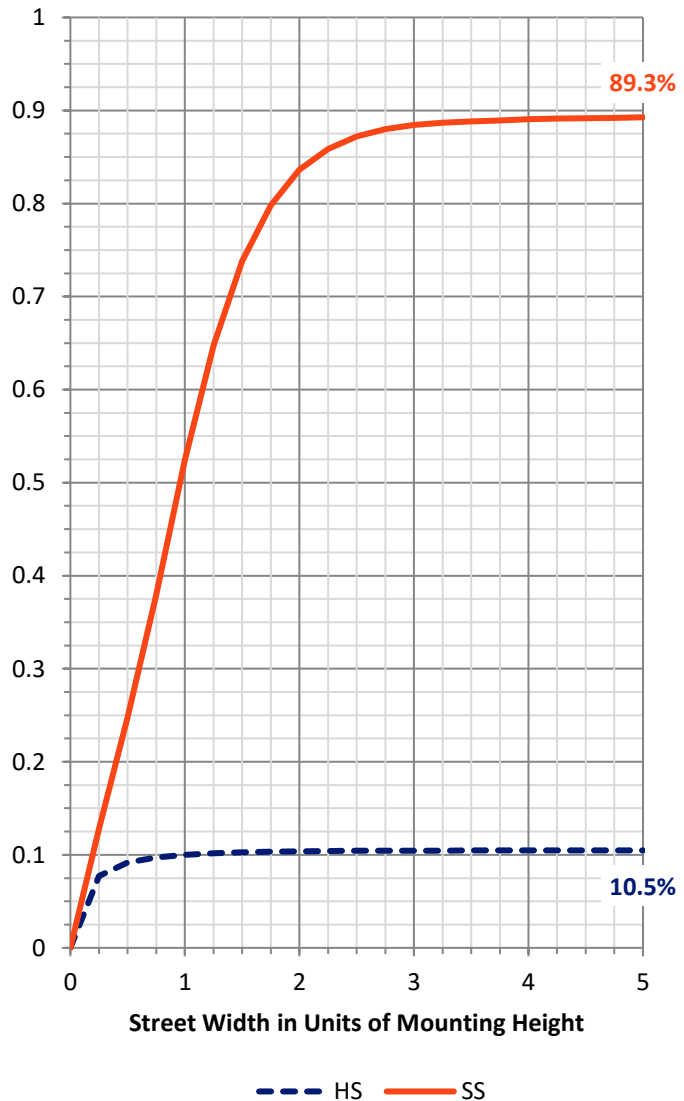
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2113.8	0.0	2113.8
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	17938.3	0.0	17938.3
	% Fixture	89.5	0.0	89.5
Total	Lumens	20052.1	0.0	20052.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.6	1.3
10°-20°	639.9	3.2
20°-30°	989.8	4.9
30°-40°	1796.0	9.0
40°-50°	3390.1	16.9
50°-60°	4898.5	24.4
60°-70°	5214.3	26.0
70°-80°	2763.2	13.8
80°-90°	90.7	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°	20052.1	100.0
0°-180°	20052.1	100.0

Coefficient of Utilization

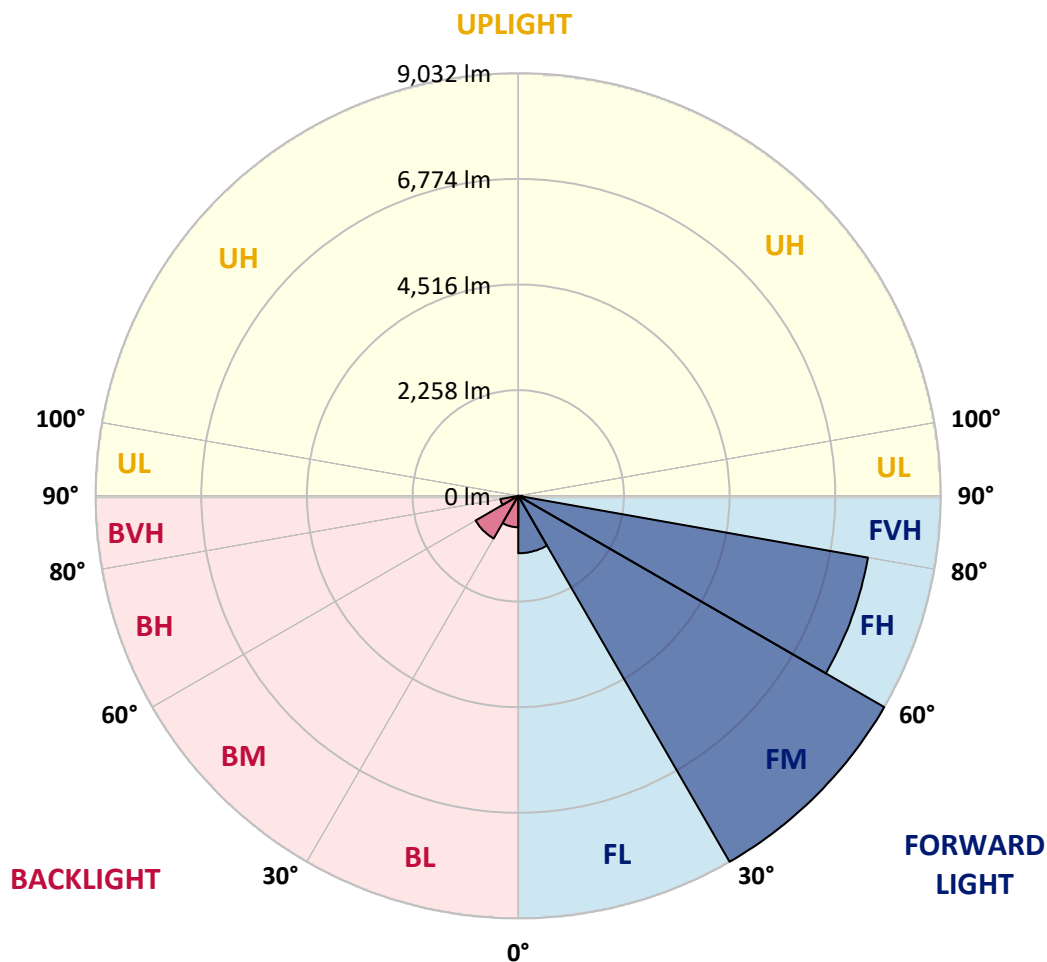


REPORT NUMBER: P968170
 CATALOG NUMBER: NAV-SB5B-722-U-T3R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1227.7	6.1			
FM (30°-60°)	9032.3	45.0			
FH (60°-80°)	7590.0	37.9			G4/12000
FVH (80°-90°)	88.3	0.4			G1/100
BL (0°-30°)	671.6	3.3	B2/1000		
BM (30°-60°)	1052.2	5.2	B2/2500		
BH (60°-80°)	387.5	1.9	B1/500		G1/500
BVH (80°-90°)	2.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4
 Type III Medium



REPORT NUMBER: P968170
 CATALOG NUMBER: NAV-SB5B-722-U-T3R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8
2.5°	2936.5	2963.2	2959.4	2977.1	2983.4	3008.7	3034.1	3068.2	3106.3	3104.9	3130.2
5°	2770.7	2797.2	2803.6	2827.7	2858.0	2897.3	2949.2	3017.6	3088.5	3099.9	3150.5
7.5°	2574.4	2602.3	2618.7	2666.8	2722.5	2803.6	2888.4	2988.5	3106.3	3122.7	3220.2
10°	2378.1	2403.4	2424.9	2493.3	2582.0	2702.3	2840.3	2984.7	3143.0	3167.0	3305.0
12.5°	2256.5	2280.6	2304.7	2364.2	2474.4	2621.2	2808.7	3002.4	3203.7	3238.0	3420.3
15°	2213.5	2235.0	2254.0	2307.2	2409.8	2577.0	2802.4	3039.1	3281.0	3326.5	3559.6
17.5°	2219.8	2231.2	2243.9	2284.4	2384.5	2556.7	2813.7	3102.5	3372.1	3412.6	3698.8
20°	2256.5	2262.9	2264.1	2292.0	2380.7	2554.1	2836.5	3163.3	3458.2	3512.7	3836.9
22.5°	2303.4	2305.9	2303.4	2322.4	2404.8	2573.2	2866.9	3236.6	3554.5	3605.1	3976.2
25°	2522.4	2474.4	2413.6	2376.9	2445.2	2609.9	2912.5	3335.5	3659.6	3709.0	4111.7
27.5°	3202.5	3064.4	2846.6	2602.3	2528.8	2663.1	2975.8	3435.5	3766.0	3810.3	4257.3
30°	4306.6	4125.6	3755.8	3205.0	2797.2	2774.5	3058.1	3535.5	3878.7	3926.8	4413.0
32.5°	5413.4	5369.2	4942.3	4180.1	3401.3	3022.6	3194.9	3671.0	4028.1	4066.1	4623.3
35°	6532.8	6442.9	6093.4	5339.9	4332.1	3527.9	3422.8	3848.3	4224.3	4267.4	4929.7
37.5°	7390.1	7335.7	7119.1	6498.6	5436.2	4308.0	3812.8	4123.1	4509.3	4557.5	5322.2
40°	8147.4	8122.1	8048.6	7639.6	6670.9	5328.6	4419.4	4548.5	4904.4	4961.4	5803.4
42.5°	8742.5	8802.1	8843.8	8729.8	7943.5	6493.6	5234.9	5146.2	5455.3	5513.5	6416.3
45°	9351.6	9371.9	9540.3	9704.9	9207.3	7711.8	6154.2	5846.5	6140.3	6212.4	7150.8
47.5°	9742.9	9823.9	10120.2	10410.2	10269.7	8919.9	7141.9	6673.4	6934.2	7069.7	7973.9
50°	9772.0	9925.3	10333.0	10838.2	11043.5	10069.6	8215.8	7615.5	7892.8	8042.3	8852.7
52.5°	9287.0	9525.1	10157.0	10896.5	11461.2	11043.5	9326.3	8557.6	8913.5	9108.5	9764.5
55°	7120.4	7431.9	9494.7	10579.9	11477.7	11781.7	10407.7	9539.1	10050.6	10270.9	10749.6
57.5°	6203.6	6360.6	7464.9	10030.3	11172.6	12079.2	11385.3	10473.6	11287.8	11561.3	11680.4
60°	5161.5	5367.8	6260.6	9131.3	10758.5	12108.3	12249.0	11679.1	12628.8	12936.5	12533.8
62.5°	3507.7	3731.8	4619.5	7586.4	10192.5	12094.4	12956.8	12920.0	14119.3	14449.7	13256.9
65°	2173.0	2313.5	2898.6	6194.7	9401.0	12109.7	13697.6	14427.0	15692.0	16027.5	13816.6
67.5°	1717.1	1781.7	2086.9	4756.2	8037.2	11767.7	14437.1	15843.9	17172.3	17438.2	13987.6
70°	1153.6	1192.9	1518.3	3188.6	5979.4	10189.9	14423.2	16555.6	17934.6	18067.6	13364.6
72.5°	607.8	638.2	887.6	1476.5	3611.5	7243.3	12157.7	15704.6	17176.1	16976.0	11423.3
75°	303.9	354.5	597.7	749.7	1542.3	4039.5	7549.6	12381.9	13519.0	12744.0	7329.4
77.5°	230.4	278.6	493.8	493.8	536.9	1360.0	3197.4	6753.2	6228.9	5186.8	2151.5
80°	146.9	189.9	431.8	373.5	224.2	345.7	833.2	1891.8	1323.3	1006.8	391.2
82.5°	86.1	124.1	359.7	246.9	125.4	127.9	235.5	402.7	343.2	267.2	120.3
85°	34.2	81.1	246.9	97.5	49.4	31.7	70.9	86.1	70.9	53.2	30.3
87.5°	0.0	19.0	43.0	0.0	3.8	2.6	5.0	6.4	6.4	5.0	10.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P968170
 CATALOG NUMBER: NAV-SB5B-722-U-T3R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8	3127.8
2.5°	3141.7	3144.2	3151.8	3153.1	3135.4	3112.5	3103.7	3099.9	3084.7	3083.4	3086.0
5°	3179.7	3191.0	3179.7	3146.7	3068.2	2958.0	2874.5	2806.1	2744.0	2725.1	2713.7
7.5°	3255.7	3267.1	3232.8	3103.7	2906.2	2687.1	2489.5	2350.2	2224.9	2178.0	2159.1
10°	3364.6	3379.7	3272.1	3011.2	2661.7	2309.7	1975.4	1739.9	1556.3	1481.5	1450.0
12.5°	3501.3	3507.7	3293.6	2870.7	2344.0	1841.2	1367.6	1115.6	952.2	891.4	872.5
15°	3652.0	3643.2	3296.2	2679.5	1910.8	1301.8	892.8	733.2	667.4	647.1	647.1
17.5°	3810.3	3773.5	3245.6	2403.4	1436.0	890.2	662.3	624.3	612.8	607.8	606.6
20°	3966.0	3883.7	3153.1	2042.5	1030.7	664.8	601.5	590.1	583.7	581.3	578.7
22.5°	4107.9	3967.4	2994.8	1623.4	748.4	587.5	568.6	558.4	547.0	542.0	540.7
25°	4245.9	4015.4	2771.9	1232.2	599.0	549.6	534.3	515.4	500.2	493.8	491.3
27.5°	4380.1	4045.9	2493.3	911.7	534.3	514.1	486.3	459.7	448.2	445.8	443.2
30°	4523.2	4055.9	2176.8	680.0	495.1	469.8	429.3	398.9	392.6	393.8	393.8
32.5°	4698.0	4071.2	1857.7	557.2	462.2	416.7	368.5	336.8	331.8	336.8	335.6
35°	4906.9	4101.5	1549.9	512.8	433.1	362.1	310.3	283.6	278.6	282.4	281.2
37.5°	5190.6	4150.9	1262.5	504.0	409.0	316.6	260.9	239.3	239.3	240.6	239.3
40°	5567.9	4282.7	1005.4	497.6	396.4	282.4	220.4	211.5	215.2	217.8	217.8
42.5°	6027.6	4562.5	832.0	490.1	382.4	267.2	200.1	196.3	202.6	205.1	205.1
45°	6543.0	4917.0	771.2	477.4	369.7	277.4	191.2	186.1	193.7	195.1	196.3
47.5°	7076.1	5264.0	763.6	463.5	357.1	292.5	188.7	177.3	186.1	187.4	188.7
50°	7615.5	5490.7	771.2	442.0	336.8	292.5	189.9	168.4	176.0	179.8	181.1
52.5°	8158.8	5594.6	766.1	395.0	301.3	274.8	189.9	160.8	168.4	171.0	171.0
55°	8685.5	5574.3	688.9	325.4	255.8	243.1	184.9	154.5	159.6	160.8	160.8
57.5°	9102.2	5291.9	545.8	253.3	207.7	202.6	168.4	146.9	150.7	149.4	149.4
60°	9320.0	4671.3	390.0	195.1	163.4	159.6	148.1	136.7	139.3	132.9	131.7
62.5°	9322.5	3850.8	260.9	154.5	130.4	126.6	126.6	122.8	120.3	107.6	103.8
65°	9123.7	2940.3	173.5	122.8	105.1	98.8	106.4	105.1	96.2	78.5	76.0
67.5°	8672.9	1927.3	131.7	96.2	81.1	77.3	84.9	88.7	82.3	65.8	64.6
70°	7745.9	1122.0	108.9	74.7	60.8	57.0	68.4	76.0	68.4	53.2	50.6
72.5°	6434.0	605.3	88.7	55.8	41.8	38.0	54.4	62.0	54.4	39.3	38.0
75°	4175.0	324.2	68.4	36.7	21.5	24.1	40.5	45.6	38.0	25.3	22.8
77.5°	1401.8	143.1	43.0	17.7	10.1	10.1	24.1	27.9	17.7	8.8	7.6
80°	312.7	59.6	17.7	7.6	3.8	3.8	5.0	5.0	2.6	0.0	0.0
82.5°	102.6	24.1	7.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	39.3	8.8	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	15.2	1.2	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)