

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: P883998

Luminaire Tested: **NAV-SB4C-835-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883998
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-835-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20084 lumens
Efficiency: N/A
Efficacy: 100.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

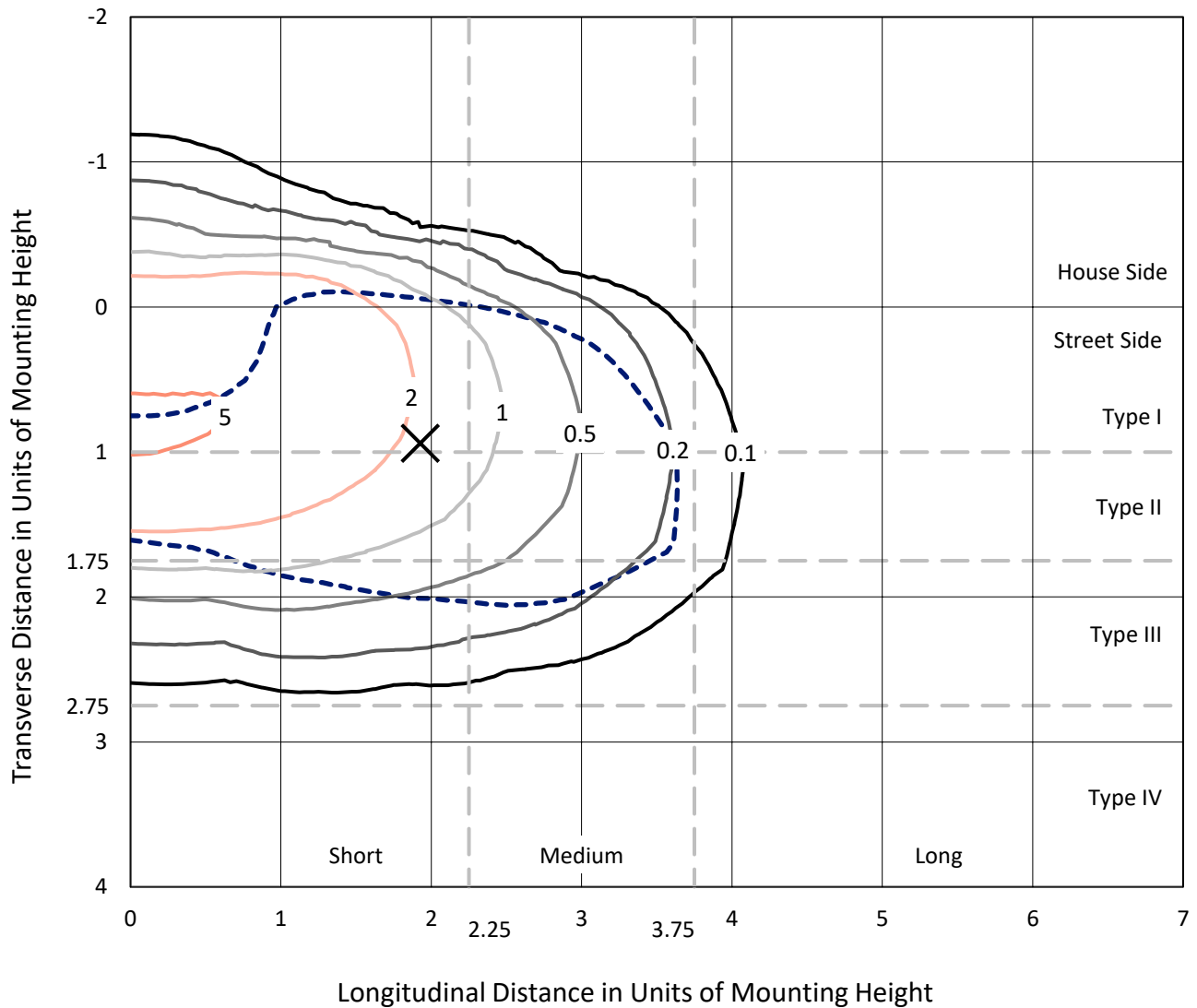
Input Watts (W): 200.7
Input Voltage (V): 120.0
Input Current (Ain): 1.714
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P883998
 CATALOG NUMBER: NAV-SB4C-835-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

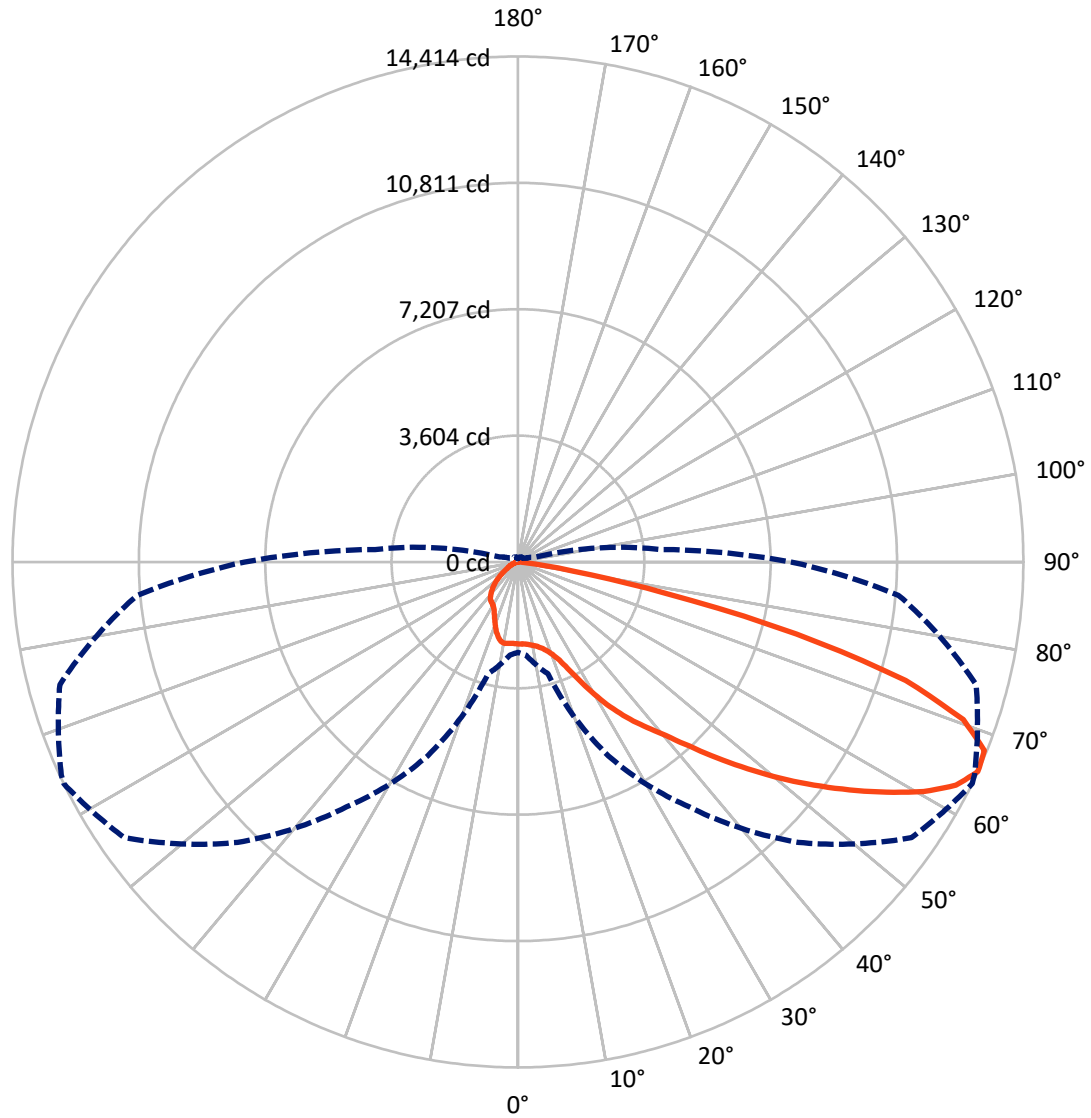
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P883998
CATALOG NUMBER: NAV-SB4C-835-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P883998
 CATALOG NUMBER: NAV-SB4C-835-U-T3-HSS

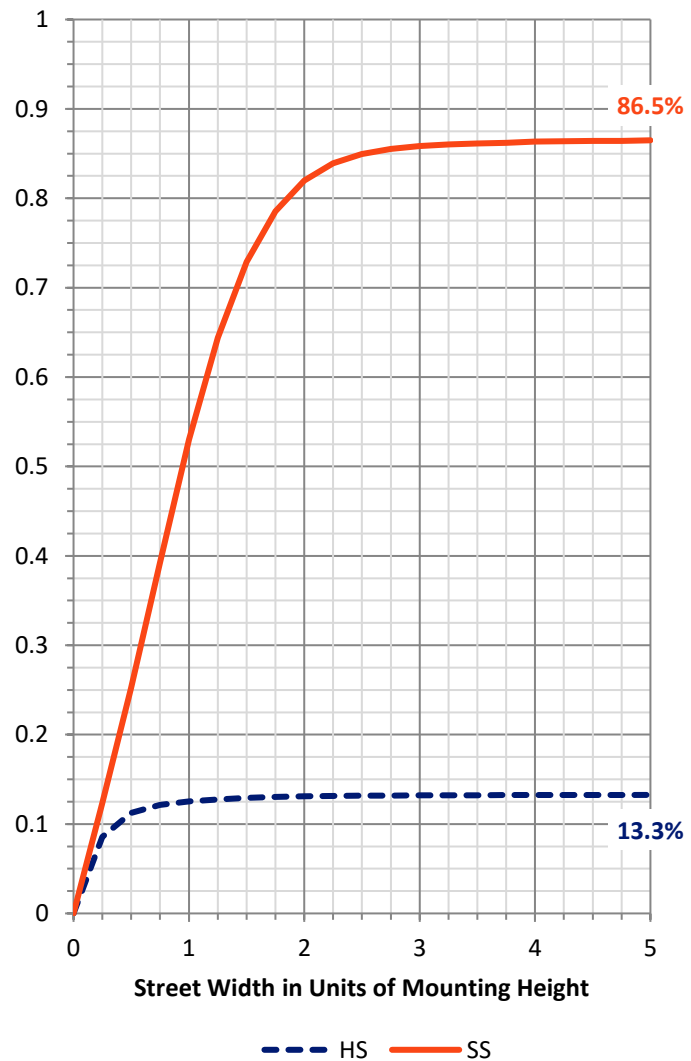
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2685.8	0.0	2685.8
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	17398.2	0.0	17398.2
	% Fixture	86.6	0.0	86.6
Total	Lumens	20084.0	0.0	20084.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	215.5	1.1
10°-20°	584.5	2.9
20°-30°	1107.7	5.5
30°-40°	2241.4	11.2
40°-50°	3818.2	19.0
50°-60°	5192.5	25.9
60°-70°	4876.0	24.3
70°-80°	1953.5	9.7
80°-90°	94.6	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°	20084.0	100.0
0°-180°	20084.0	100.0

Coefficient of Utilization



REPORT NUMBER: P883998

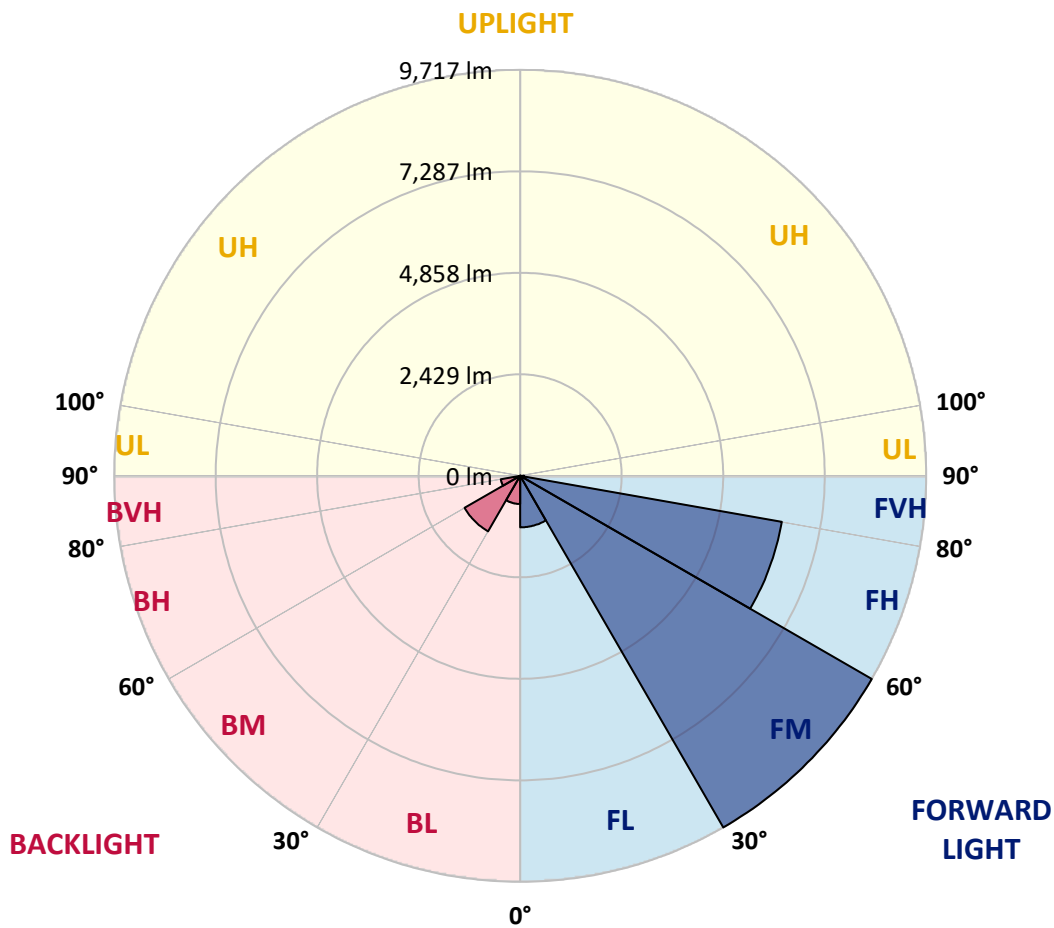
CATALOG NUMBER: NAV-SB4C-835-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1233.4	6.1			
FM (30°-60°)	9716.6	48.4			
FH (60°-80°)	6358.1	31.7			G3/7500
FVH (80°-90°)	90.0	0.4			G1/100
BL (0°-30°)	674.3	3.4	B2/1000		
BM (30°-60°)	1535.5	7.6	B2/2500		
BH (60°-80°)	471.4	2.3	B1/500		G1/500
BVH (80°-90°)	4.6	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-G3

Type III Short



REPORT NUMBER: P883998
 CATALOG NUMBER: NAV-SB4C-835-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	2336.0	2336.0	2336.0	2336.0	2336.0	2336.0	2336.0	2336.0	2336.0	2336.0	2336.0
2.5°	2327.9	2344.1	2340.0	2336.0	2334.6	2337.3	2338.7	2337.3	2337.3	2337.3	2338.7
5°	2283.5	2296.9	2296.9	2306.4	2319.8	2336.0	2348.1	2350.8	2353.5	2357.5	2356.2
7.5°	2198.6	2209.4	2217.5	2248.5	2282.1	2325.2	2361.6	2380.4	2383.1	2397.9	2403.3
10°	2140.8	2154.2	2167.7	2200.0	2248.5	2313.1	2375.0	2420.8	2427.5	2462.5	2478.7
12.5°	2138.1	2151.5	2169.0	2204.0	2260.6	2329.2	2404.6	2470.6	2482.7	2533.9	2567.6
15°	2166.3	2182.5	2198.6	2241.7	2302.3	2385.8	2466.6	2548.7	2560.8	2633.5	2669.9
17.5°	2224.2	2245.8	2257.9	2301.0	2365.6	2458.5	2564.9	2659.1	2669.9	2754.7	2800.5
20°	2338.7	2364.3	2368.3	2403.3	2466.6	2566.2	2692.8	2809.9	2823.4	2920.3	2971.5
22.5°	2575.6	2612.0	2579.7	2597.2	2653.7	2753.4	2890.7	3038.8	3057.6	3168.0	3213.8
25°	2993.0	3044.2	2960.7	2931.1	2955.3	3059.0	3231.3	3418.5	3440.0	3528.9	3551.8
27.5°	3813.0	3747.0	3620.4	3496.6	3423.9	3483.1	3677.0	3908.6	3935.5	4021.7	3994.7
30°	4713.7	4655.8	4484.8	4210.1	4037.8	4028.4	4207.5	4466.0	4496.9	4579.1	4496.9
32.5°	5615.8	5560.6	5374.8	5036.8	4737.9	4589.8	4713.7	5000.5	5016.6	5069.1	4948.0
35°	6503.0	6446.5	6260.7	5914.7	5547.1	5210.5	5186.3	5509.4	5514.8	5570.0	5389.6
37.5°	7395.7	7348.6	7150.7	6811.4	6449.2	5984.7	5759.8	5991.4	5998.1	6052.0	5864.9
40°	8032.5	8052.7	7916.7	7654.2	7343.2	6835.6	6403.4	6504.4	6464.0	6554.2	6442.5
42.5°	8579.2	8619.6	8501.1	8369.1	8188.7	7741.7	7200.5	7183.0	7118.3	7166.8	7051.0
45°	9051.7	9085.4	8979.0	8948.1	8944.0	8630.3	8071.6	7966.6	7876.4	7866.9	7728.2
47.5°	9225.4	9290.1	9335.8	9439.5	9641.5	9509.5	8972.3	8809.4	8708.4	8634.4	8414.9
50°	9291.4	9360.1	9516.2	9817.8	10295.8	10352.4	9869.0	9685.9	9562.0	9427.4	9104.3
52.5°	9202.5	9325.1	9535.1	10042.7	10736.1	11028.2	10729.3	10569.1	10427.8	10208.3	9729.0
55°	8678.8	8801.3	9230.8	10040.0	10955.5	11502.2	11542.6	11471.2	11312.3	10966.3	10233.9
57.5°	7574.8	7756.5	8436.4	9698.0	10951.5	11910.1	12339.6	12390.8	12213.1	11717.6	10631.1
60°	6045.3	6291.7	7121.0	8940.0	10613.6	12130.9	13038.4	13294.2	13105.7	12458.1	10952.8
62.5°	4218.2	4503.7	5288.6	7752.5	9840.7	11972.1	13548.7	14021.3	13878.5	13120.5	11076.7
65°	2572.9	2664.5	3297.3	6100.5	8526.7	11306.9	13706.2	14414.4	14367.3	13525.8	10893.6
67.5°	1713.9	1790.7	1972.5	4183.2	6618.8	9978.1	13329.2	14345.7	14359.2	13459.8	10223.1
70°	1032.7	1098.7	1217.1	2432.9	4289.6	7897.9	12161.9	13470.6	13548.7	12577.9	8952.1
72.5°	425.5	469.9	577.6	1102.7	2221.5	5012.6	9684.5	11565.4	11747.2	10575.9	6870.6
75°	241.0	263.9	339.3	553.4	964.0	2336.0	5866.2	8210.3	8478.2	7289.3	4133.4
77.5°	160.2	171.0	219.5	358.1	542.6	797.1	2507.0	4277.5	4789.1	3981.3	1789.3
80°	107.7	117.1	150.8	239.7	352.8	342.0	798.4	1584.7	1949.6	1367.9	436.2
82.5°	72.7	74.1	107.7	157.5	223.5	165.6	235.6	492.8	619.3	395.8	165.6
85°	41.7	40.4	79.4	91.6	99.6	68.7	71.4	148.1	193.9	167.0	94.2
87.5°	5.4	8.1	31.0	24.2	13.5	14.8	14.8	25.6	37.7	40.4	20.2
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: P883998

CATALOG NUMBER: NAV-SB4C-835-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2336.0	2336.0	2336.0	2336.0	2336.0	2336.0	2336.0	2336.0	2336.0	2336.0	2336.0
2.5°	2338.7	2337.3	2333.3	2329.2	2319.8	2314.4	2317.1	2314.4	2313.1	2314.4	2319.8
5°	2356.2	2352.1	2341.4	2327.9	2309.1	2286.2	2271.4	2249.8	2229.6	2217.5	2220.2
7.5°	2403.3	2399.3	2384.4	2346.7	2286.2	2190.6	2103.1	2026.3	1968.4	1934.8	1936.1
10°	2478.7	2472.0	2449.1	2365.6	2206.7	1998.0	1824.4	1680.3	1586.0	1541.6	1537.6
12.5°	2567.6	2559.5	2519.1	2348.1	2055.9	1730.1	1490.4	1330.2	1242.7	1203.7	1199.6
15°	2672.6	2661.8	2582.4	2264.6	1836.5	1433.9	1214.4	1094.6	1038.1	1003.1	1004.4
17.5°	2803.2	2784.3	2629.5	2139.4	1598.2	1207.7	1044.8	954.6	904.8	871.1	868.4
20°	2972.8	2941.9	2667.2	1990.0	1378.7	1065.0	930.4	855.0	817.3	787.6	782.2
22.5°	3209.8	3165.4	2713.0	1828.4	1223.9	966.7	845.5	790.3	759.4	725.7	720.3
25°	3503.3	3450.8	2769.5	1678.9	1117.5	881.9	783.6	737.8	701.5	662.4	658.4
27.5°	3913.9	3819.7	2836.8	1556.4	1025.9	809.2	727.0	675.9	634.1	601.8	595.1
30°	4371.7	4216.9	2896.1	1482.4	942.5	741.9	653.0	601.8	562.8	539.9	535.9
32.5°	4805.2	4595.2	2935.1	1450.1	867.1	665.1	572.2	517.0	487.4	480.7	484.7
35°	5214.5	4937.2	2931.1	1419.1	799.8	588.4	492.8	436.2	413.3	417.4	417.4
37.5°	5685.8	5302.1	2902.8	1370.6	744.6	518.4	424.1	374.3	354.1	355.4	360.8
40°	6233.8	5723.5	2885.3	1279.1	684.0	453.7	367.6	327.2	312.4	307.0	305.6
42.5°	6818.1	6131.4	2888.0	1175.4	608.6	395.8	328.5	294.9	281.4	277.4	276.0
45°	7405.1	6520.5	2892.0	1067.7	529.1	351.4	300.2	272.0	263.9	258.5	258.5
47.5°	7957.1	6851.8	2816.6	951.9	451.0	317.7	277.4	258.5	251.8	245.0	245.0
50°	8471.5	7072.6	2634.9	817.3	389.1	290.8	259.9	246.4	239.7	232.9	232.9
52.5°	8871.3	7107.6	2334.6	678.6	346.0	270.6	249.1	237.0	228.9	222.2	220.8
55°	9049.1	6888.1	1907.8	549.3	312.4	253.1	238.3	226.2	216.8	210.0	208.7
57.5°	9003.3	6426.3	1487.8	441.6	280.0	235.6	224.8	216.8	206.0	195.2	193.9
60°	8778.4	5808.3	1121.5	367.6	250.4	216.8	210.0	203.3	188.5	172.3	169.6
62.5°	8389.3	5031.4	799.8	304.3	218.1	195.2	192.5	187.1	165.6	136.0	133.3
65°	7794.2	4087.6	538.6	253.1	187.1	171.0	172.3	162.9	134.6	101.0	98.3
67.5°	6924.5	2989.0	344.7	207.3	156.2	142.7	144.1	138.7	114.4	86.2	82.1
70°	5816.4	1979.2	224.8	157.5	125.2	110.4	118.5	119.8	96.9	70.0	67.3
72.5°	4264.0	1168.7	157.5	117.1	91.6	76.7	96.9	99.6	78.1	52.5	49.8
75°	2430.2	554.7	118.5	84.8	56.5	53.9	75.4	75.4	53.9	35.0	32.3
77.5°	1020.6	231.6	83.5	55.2	32.3	31.0	51.2	47.1	26.9	16.2	16.2
80°	294.9	103.7	44.4	26.9	13.5	12.1	20.2	14.8	6.7	2.7	2.7
82.5°	115.8	45.8	17.5	10.8	5.4	5.4	2.7	0.0	0.0	0.0	0.0
85°	68.7	18.8	8.1	4.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	17.5	4.0	2.7	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)