

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: P963700

Luminaire Tested: **NAV-SB3A-835-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963700
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-SB3A-835-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 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: 10834.2 lumens
Efficiency: N/A
Efficacy: 127.9 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): 84.7
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

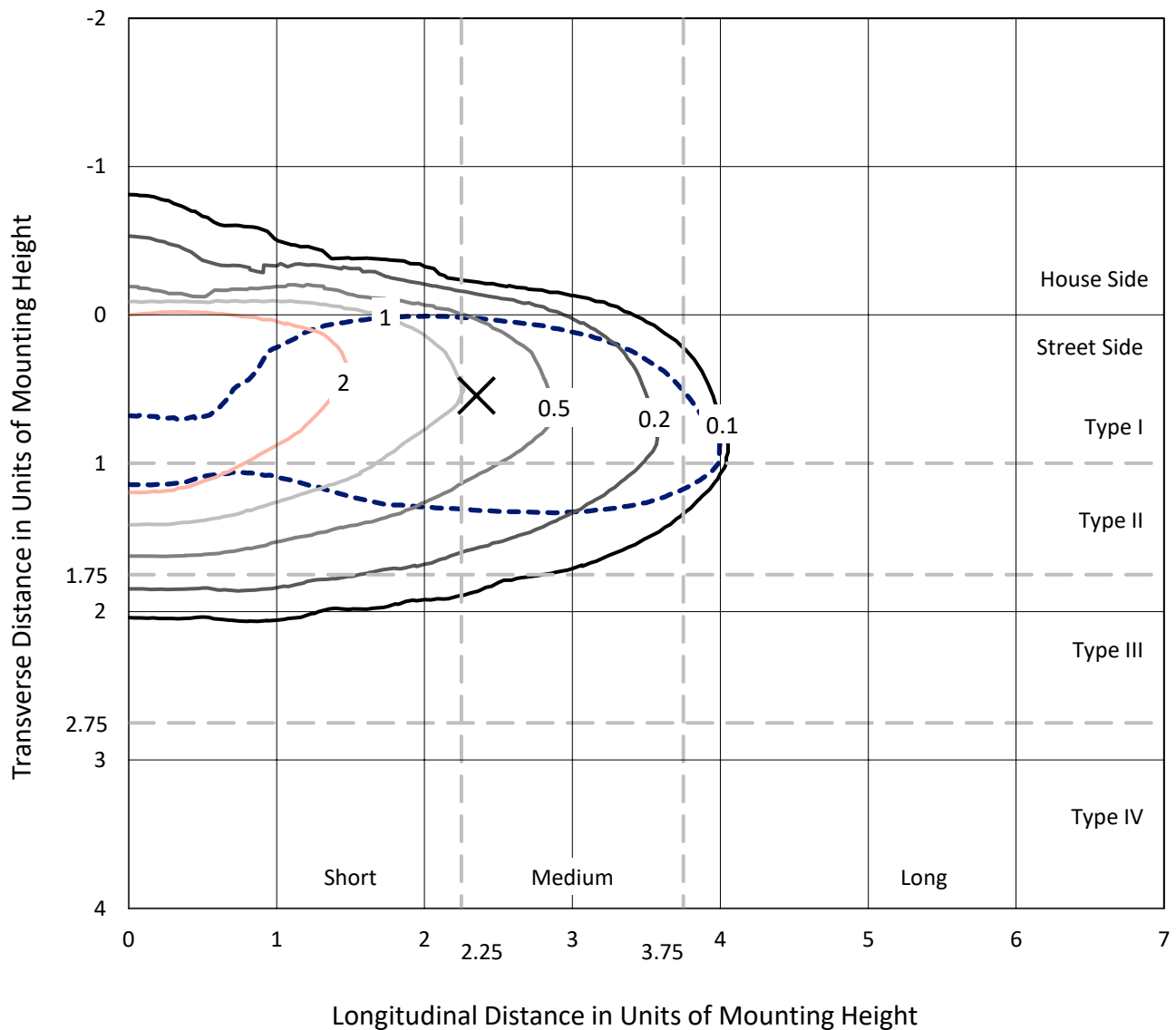


REPORT NUMBER: P963700

CATALOG NUMBER: NAV-SB3A-835-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

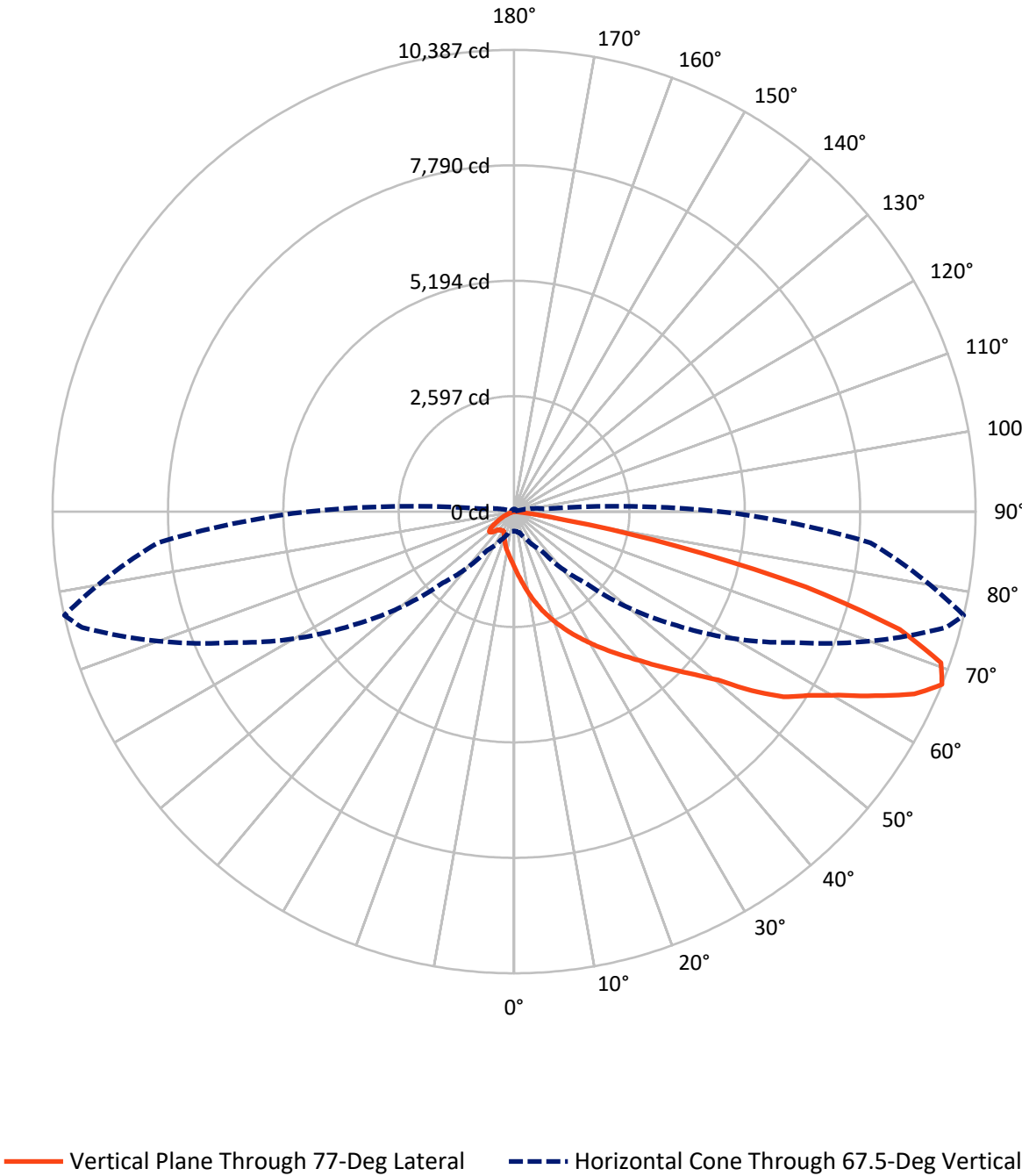
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc
Type II - Medium - N/A

REPORT NUMBER: P963700
CATALOG NUMBER: NAV-SB3A-835-U-T2R-HSS

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	797.1	0.0	797.1
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	10037.2	0.0	10037.2
	% Fixture	92.6	0.0	92.6
Total	Lumens	10834.2	0.0	10834.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.5	1.2
10°-20°	446.5	4.1
20°-30°	861.7	8.0
30°-40°	1496.0	13.8
40°-50°	2172.1	20.0
50°-60°	2494.4	23.0
60°-70°	2165.6	20.0
70°-80°	1020.0	9.4
80°-90°	50.4	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°	10834.2	100.0
0°-180°	10834.2	100.0

Coefficient of Utilization



REPORT NUMBER: P963700

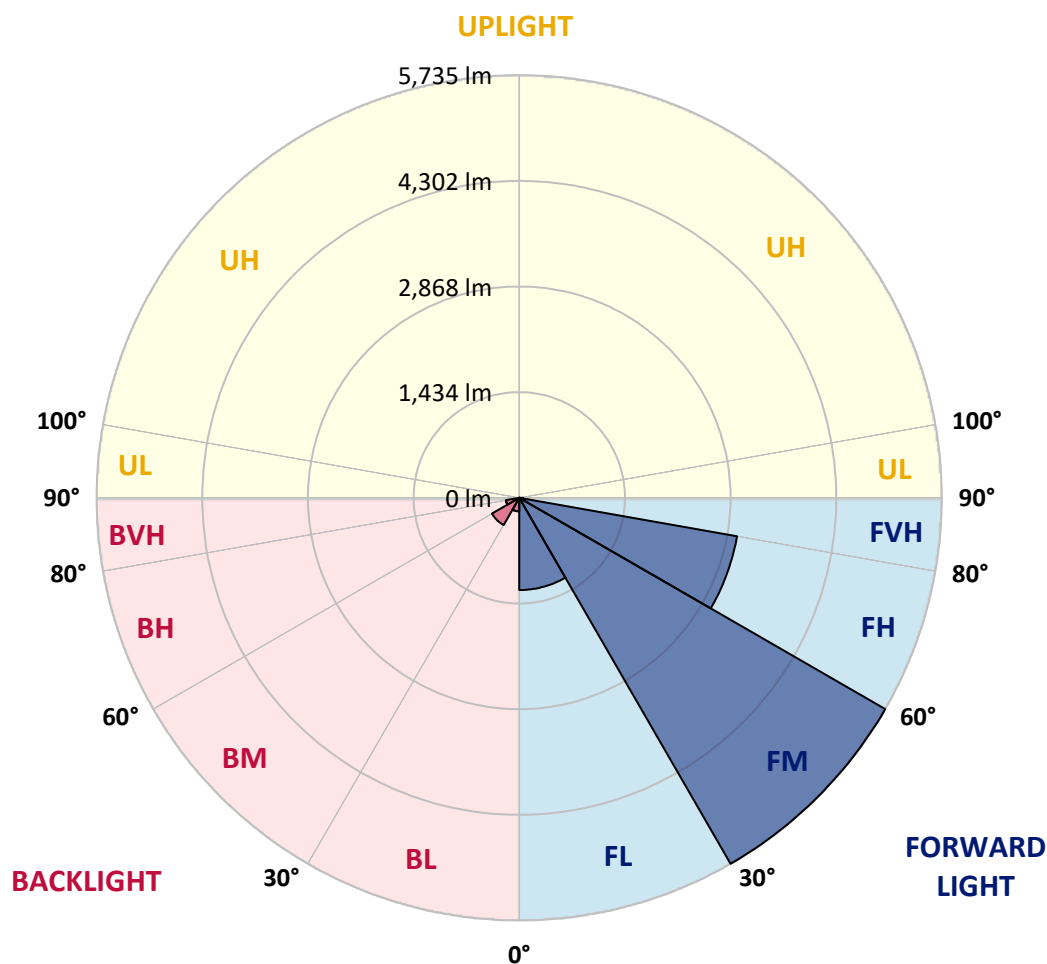
CATALOG NUMBER: NAV-SB3A-835-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1251.2	11.5			
FM	(30°-60°)	5735.4	52.9			
FH	(60°-80°)	3001.1	27.7			G2/5000
FVH	(80°-90°)	49.5	0.5			G1/100
BL	(0°-30°)	184.5	1.7	B1/500		
BM	(30°-60°)	427.1	3.9	B1/1000		
BH	(60°-80°)	184.5	1.7	B1/500		G1/500
BVH	(80°-90°)	0.9	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium



REPORT NUMBER: P963700

CATALOG NUMBER: NAV-SB3A-835-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4
2.5°	1729.7	1740.4	1725.0	1695.4	1651.0	1622.1	1551.4	1484.8	1410.8	1387.2	1313.2
5°	2108.5	2117.9	2100.4	2068.1	2008.9	1952.4	1859.6	1720.3	1575.6	1529.2	1398.0
7.5°	2389.1	2394.4	2387.7	2358.1	2301.5	2237.7	2134.0	1969.2	1754.6	1703.4	1502.3
10°	2590.9	2608.3	2606.4	2594.9	2557.3	2505.4	2395.1	2207.3	1955.1	1889.2	1620.0
12.5°	2724.8	2744.2	2755.7	2781.2	2779.3	2746.3	2649.4	2451.0	2154.9	2077.6	1752.5
15°	2763.8	2784.6	2828.4	2887.5	2940.0	2956.8	2888.9	2689.8	2374.9	2276.0	1888.5
17.5°	2741.6	2773.9	2826.3	2919.8	3034.9	3110.9	3103.5	2920.5	2574.7	2461.7	2021.7
20°	2790.7	2821.6	2862.6	2941.3	3075.3	3213.2	3268.3	3141.2	2773.2	2654.7	2161.6
22.5°	3062.5	3057.1	3061.2	3073.9	3154.0	3290.6	3404.2	3341.7	2969.6	2848.6	2309.6
25°	3493.1	3468.8	3427.8	3358.5	3338.3	3404.2	3522.6	3519.3	3176.9	3047.0	2461.0
27.5°	3986.8	3982.8	3886.6	3719.8	3625.6	3600.0	3656.6	3692.3	3382.1	3243.5	2613.0
30°	4459.9	4470.6	4340.8	4155.0	3982.1	3881.9	3830.8	3856.4	3590.6	3455.4	2769.9
32.5°	4871.6	4883.0	4741.8	4524.5	4310.5	4189.4	4081.8	4018.5	3818.0	3670.6	2942.1
35°	5219.4	5230.9	5068.7	4828.6	4600.4	4490.8	4369.1	4196.1	4046.8	3909.6	3133.8
37.5°	5530.2	5526.9	5309.6	5067.4	4843.3	4756.5	4692.7	4414.8	4282.2	4149.7	3346.4
40°	5713.9	5728.0	5542.4	5275.3	5058.0	4994.7	4990.6	4685.9	4554.1	4425.5	3579.2
42.5°	5767.7	5792.6	5658.1	5438.8	5241.6	5173.0	5278.6	4979.2	4870.3	4745.1	3842.2
45°	5670.8	5695.1	5633.8	5481.8	5366.8	5322.3	5526.2	5283.4	5207.9	5084.2	4139.0
47.5°	5388.3	5418.6	5433.3	5401.0	5399.7	5444.8	5748.2	5603.6	5608.9	5482.4	4482.7
50°	4841.3	4892.4	5028.3	5142.7	5319.6	5541.7	5964.2	5950.7	6061.0	5952.1	4930.8
52.5°	3846.9	3919.6	4387.8	4700.6	5098.3	5523.5	6201.7	6507.8	6854.3	6694.8	5562.6
55°	3091.4	3091.4	3472.2	4057.6	4666.4	5403.8	6305.3	6869.8	7394.5	7356.8	6007.2
57.5°	2520.3	2550.5	2793.3	3310.7	4041.4	5118.5	6369.1	7097.1	7829.8	7802.2	6441.8
60°	1555.4	1620.7	2079.5	2590.2	3330.2	4610.6	6328.9	7327.2	8358.0	8380.1	6965.3
62.5°	876.0	900.2	1104.7	1863.6	2589.6	3927.7	6020.0	7455.7	9033.4	9127.6	7504.8
65°	604.9	616.9	695.7	1159.9	1795.0	3127.1	5416.5	7375.7	9710.2	9900.6	7962.3
67.5°	439.3	445.4	494.5	708.5	1065.0	2267.3	4470.6	6971.9	10068.8	10387.0	8049.7
70°	337.7	341.7	377.4	465.6	629.0	1399.3	3246.8	6169.4	9809.1	10189.2	7601.7
72.5°	274.5	278.5	306.1	344.5	417.1	827.5	1967.9	5010.2	8662.7	9073.1	6471.4
75°	231.4	236.8	261.7	286.6	327.0	531.5	923.0	3489.0	6514.5	6783.7	4500.2
77.5°	128.5	118.4	212.6	237.5	275.8	336.4	431.9	2053.3	3648.5	3723.1	1996.8
80°	80.1	82.7	168.8	191.1	212.0	169.5	197.8	790.5	1264.8	1201.6	386.8
82.5°	4.7	10.8	129.9	138.0	145.3	72.7	74.7	268.4	304.7	279.8	68.6
85°	0.0	0.0	59.2	47.8	50.4	20.8	21.5	62.5	41.0	44.4	13.4
87.5°	0.0	0.0	0.0	1.3	0.0	2.0	4.0	5.4	2.0	2.7	4.7
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: P963700

CATALOG NUMBER: NAV-SB3A-835-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4
2.5°	1266.2	1219.0	1123.5	1030.0	954.0	883.3	832.9	785.2	761.0	759.5	758.2
5°	1304.5	1205.6	1014.5	845.7	709.8	600.8	530.1	479.7	454.1	445.4	444.0
7.5°	1358.3	1209.7	919.0	684.2	524.1	430.6	390.2	374.0	368.7	362.6	361.3
10°	1426.3	1219.0	833.5	551.0	413.1	366.0	349.8	343.1	339.1	335.1	333.7
12.5°	1502.3	1227.8	748.8	457.5	363.3	339.1	327.7	319.6	314.2	309.4	308.1
15°	1576.3	1233.2	660.7	392.3	337.7	318.3	306.1	297.4	290.0	284.5	283.9
17.5°	1649.6	1240.6	577.9	353.2	316.8	297.4	285.3	274.5	268.4	262.4	261.7
20°	1731.0	1239.2	499.9	325.6	296.0	276.5	263.7	253.7	247.5	240.9	240.2
22.5°	1806.4	1232.6	431.2	302.1	274.5	255.6	241.5	231.4	225.4	220.0	219.4
25°	1893.2	1227.1	374.0	280.5	254.3	235.4	220.0	210.5	203.9	199.2	198.4
27.5°	1976.6	1219.0	332.3	261.1	234.8	216.7	201.8	191.1	185.0	181.6	181.6
30°	2058.7	1217.1	316.8	242.2	217.3	199.2	184.3	174.2	169.5	168.2	167.5
32.5°	2157.6	1222.4	323.6	235.4	201.2	183.0	168.8	161.4	156.7	156.7	156.7
35°	2263.2	1221.1	333.7	241.5	190.4	166.9	156.1	151.4	146.7	146.7	146.7
37.5°	2395.7	1223.1	341.7	251.6	186.3	153.4	147.3	141.2	138.6	138.6	138.6
40°	2593.6	1289.8	337.7	260.3	185.0	144.0	131.8	129.9	127.8	127.8	127.8
42.5°	2835.8	1434.4	343.1	261.1	184.3	137.2	121.1	125.2	120.4	119.7	119.1
45°	3100.8	1592.4	377.4	246.9	183.7	133.9	115.7	120.4	113.1	113.1	113.1
47.5°	3363.8	1749.3	412.5	226.7	181.6	133.2	111.0	108.3	106.3	107.0	107.0
50°	3726.5	1877.1	425.9	199.2	176.9	131.8	102.3	102.9	101.6	102.9	102.9
52.5°	4121.4	1903.9	409.7	168.2	163.5	127.8	96.2	98.9	98.2	99.5	99.5
55°	4367.6	1875.0	338.5	139.9	142.7	111.7	90.2	95.5	95.5	95.5	95.5
57.5°	4622.0	1751.9	240.2	113.7	118.4	91.5	84.8	92.1	91.5	90.8	90.8
60°	4805.0	1552.8	158.1	93.5	94.2	75.3	78.7	86.8	86.1	82.7	82.7
62.5°	4941.5	1332.8	101.6	79.4	72.0	68.0	72.0	78.7	76.1	68.6	67.2
65°	4926.0	1028.0	78.0	68.0	59.2	59.2	62.5	68.6	60.6	48.5	47.0
67.5°	4638.8	695.7	64.6	57.2	49.8	49.1	51.8	57.2	51.8	41.0	39.7
70°	4125.5	454.8	51.8	44.4	39.7	36.3	41.7	49.1	43.8	33.0	31.6
72.5°	3348.4	277.2	39.1	32.3	28.9	23.6	33.0	40.4	35.0	24.2	22.9
75°	2166.3	141.2	27.0	20.8	15.5	14.1	24.2	30.2	24.2	14.8	12.8
77.5°	828.8	59.2	14.8	9.4	8.1	6.8	13.4	18.1	10.0	3.4	2.7
80°	159.5	24.9	7.4	4.7	4.0	2.7	2.0	1.3	0.0	0.0	0.0
82.5°	27.6	8.1	2.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.4	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.4	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)