

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: P966625

Luminaire Tested: **NAV-SB4C-727-U-T4W-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P966625  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB4C-727-U-T4W-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21981.1 lumens  
Efficiency: N/A  
Efficacy: 109.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G4

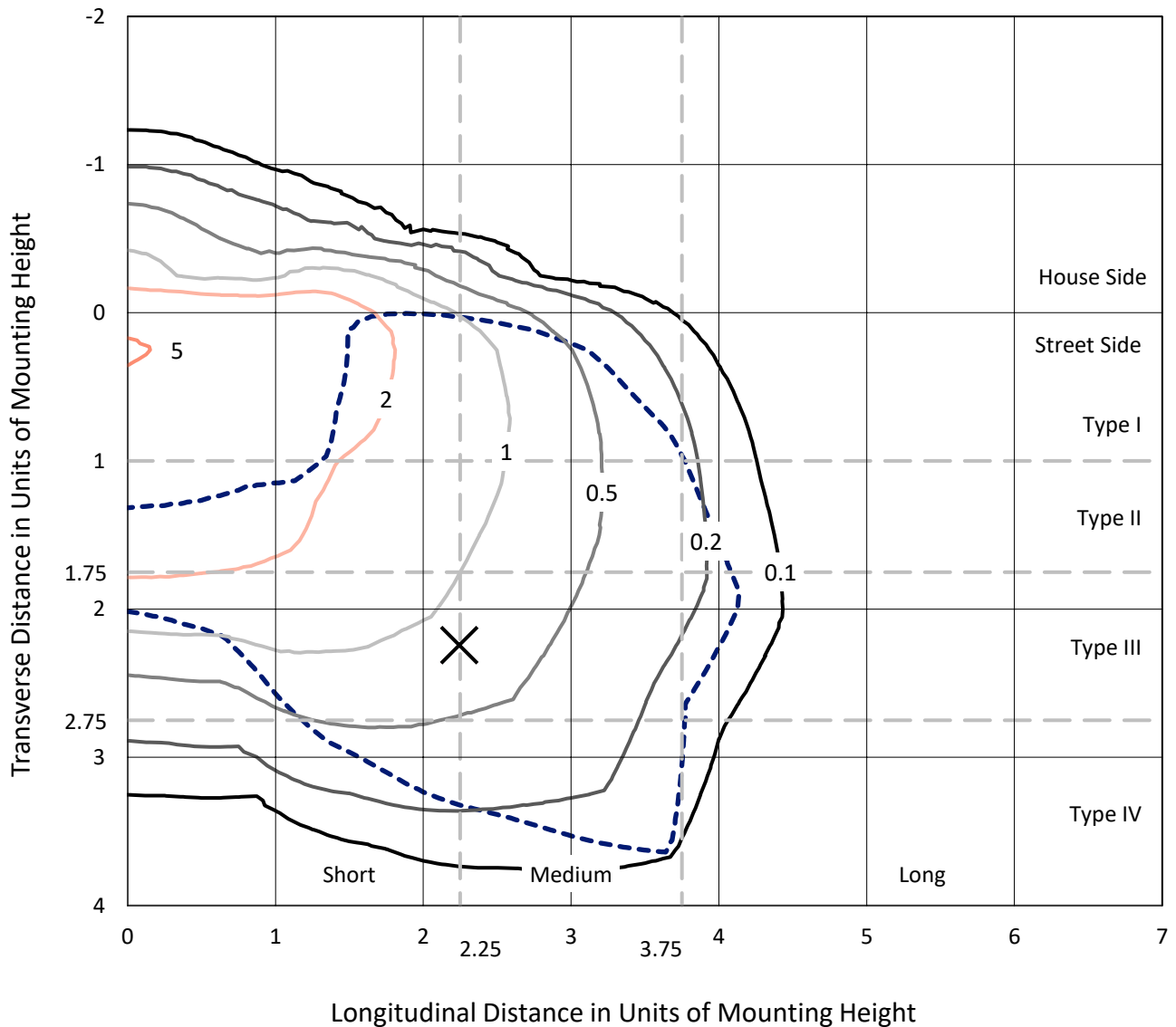
Input Watts (W): 200.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P966625  
 CATALOG NUMBER: NAV-SB4C-727-U-T4W-HSS

### Iso-Footcandle Lines of Horizontal Illumination

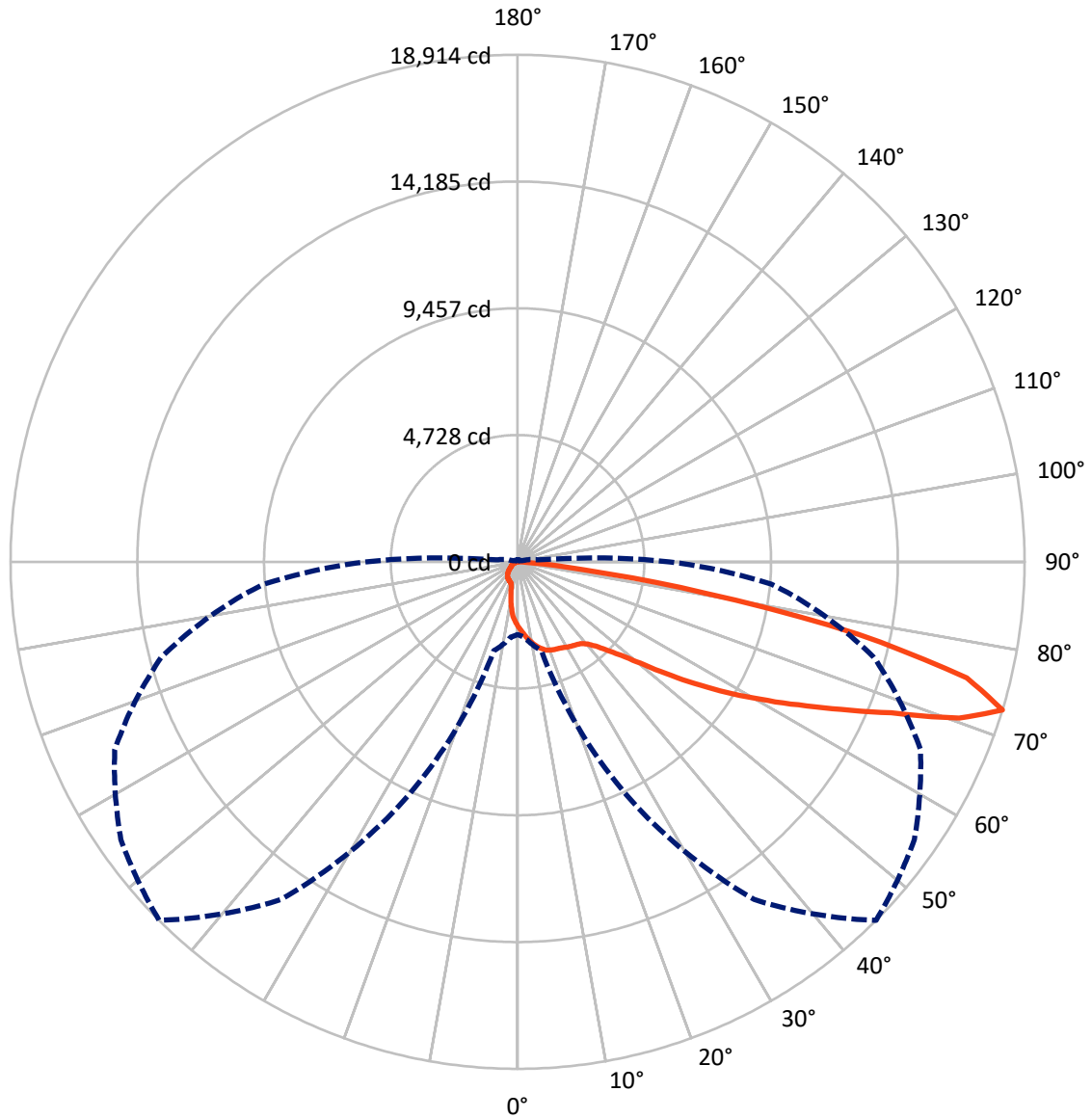
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 fc  
 Type IV - Short - N/A

REPORT NUMBER: P966625  
CATALOG NUMBER: NAV-SB4C-727-U-T4W-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P966625  
 CATALOG NUMBER: NAV-SB4C-727-U-T4W-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2309.6	0.0	2309.6
	% Fixture	10.5	0.0	10.5
<b>Street Side</b>	Lumens	19671.5	0.0	19671.5
	% Fixture	89.5	0.0	89.5
<b>Total</b>	Lumens	21981.1	0.0	21981.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	226.9	1.0
10°-20°	663.1	3.0
20°-30°	1088.9	5.0
30°-40°	1544.3	7.0
40°-50°	2552.6	11.6
50°-60°	4585.5	20.9
60°-70°	6367.2	29.0
70°-80°	4618.6	21.0
80°-90°	333.9	1.5
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°	21981.1	100.0
0°-180°	21981.1	100.0

**Coefficient of Utilization**



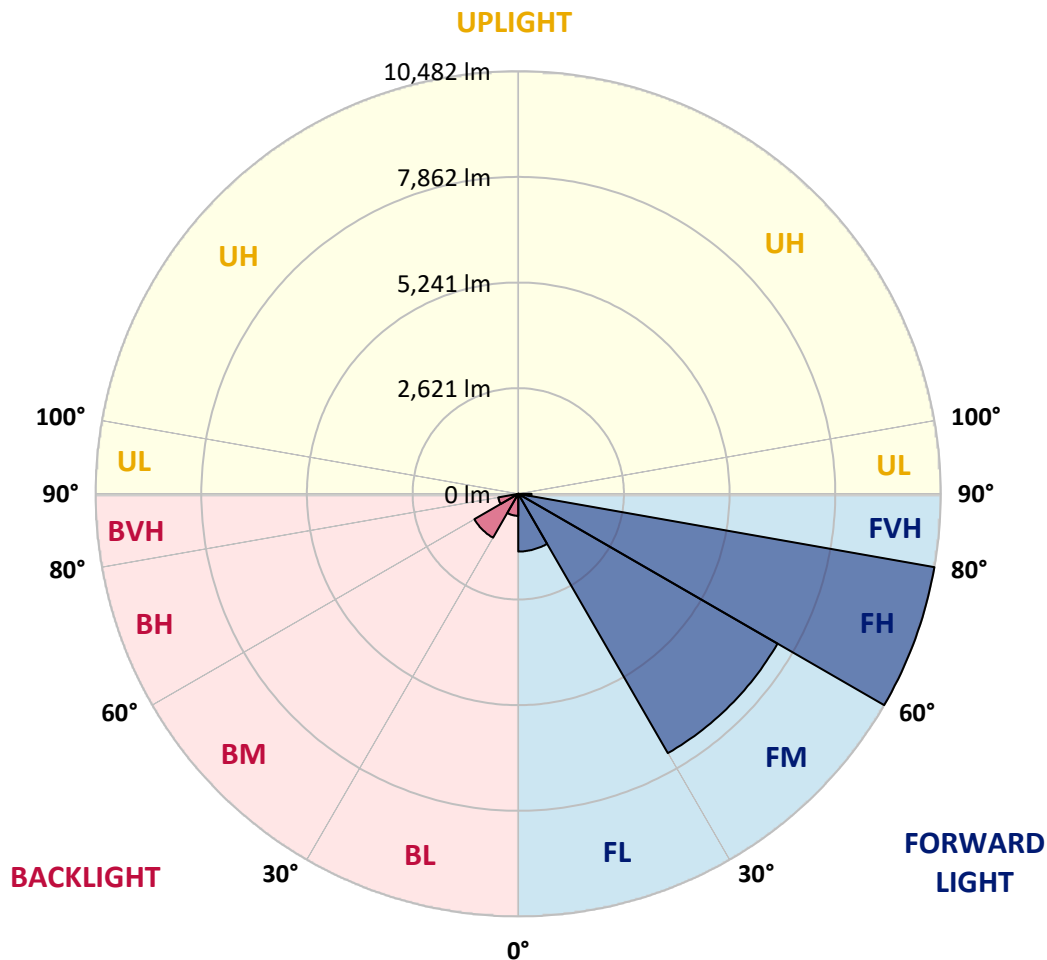
REPORT NUMBER: P966625  
 CATALOG NUMBER: NAV-SB4C-727-U-T4W-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1431.9	6.5			
FM	(30°-60°)	7426.4	33.8			
FH	(60°-80°)	10482.2	47.7			G4/12000
FVH	(80°-90°)	331.1	1.5			G3/500
BL	(0°-30°)	547.1	2.5	B2/1000		
BM	(30°-60°)	1256.1	5.7	B2/2500		
BH	(60°-80°)	503.7	2.3	B2/1000		G2/1000
BVH	(80°-90°)	2.8	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 IV Short



REPORT NUMBER: P966625  
 CATALOG NUMBER: NAV-SB4C-727-U-T4W-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2408.0	2408.0	2408.0	2408.0	2408.0	2408.0	2408.0	2408.0	2408.0	2408.0	2408.0
2.5°	2630.1	2634.7	2631.6	2613.6	2583.6	2567.1	2558.1	2528.1	2508.6	2474.1	2438.1
5°	2871.6	2889.7	2879.2	2843.1	2786.2	2745.7	2733.7	2672.2	2616.6	2552.1	2477.1
7.5°	3128.3	3137.2	3117.7	3071.2	2994.7	2925.7	2915.2	2829.7	2741.2	2642.1	2540.2
10°	3350.3	3360.8	3330.8	3263.3	3176.3	3090.8	3075.7	2981.2	2876.1	2754.7	2624.1
12.5°	3536.4	3546.8	3507.9	3426.8	3330.8	3242.3	3227.3	3128.3	3012.7	2877.7	2715.6
15°	3677.4	3696.9	3644.4	3557.4	3453.8	3365.3	3357.8	3260.3	3147.8	2997.7	2825.2
17.5°	3759.9	3779.4	3729.9	3624.9	3536.4	3461.3	3452.3	3371.3	3266.3	3122.3	2931.7
20°	3773.4	3791.4	3738.9	3647.4	3573.9	3513.8	3509.4	3450.9	3374.3	3236.2	3047.2
22.5°	3732.9	3755.4	3707.4	3633.8	3582.9	3551.3	3545.4	3512.4	3468.8	3351.9	3155.3
25°	3690.9	3708.9	3672.9	3608.4	3581.4	3578.4	3582.9	3576.8	3567.8	3468.8	3281.3
27.5°	3687.8	3707.4	3666.8	3605.3	3590.4	3621.8	3626.3	3654.8	3662.4	3575.4	3402.8
30°	3713.4	3726.9	3687.8	3623.4	3615.9	3687.8	3689.4	3740.4	3752.4	3665.4	3522.8
32.5°	3768.9	3783.9	3744.9	3650.3	3639.9	3740.4	3744.9	3812.4	3832.0	3761.4	3648.9
35°	3899.4	3917.4	3872.4	3725.4	3687.8	3789.9	3803.4	3882.9	3922.0	3863.4	3779.4
37.5°	4225.0	4172.5	4111.0	3877.0	3797.4	3867.9	3890.4	3983.5	4052.4	3985.0	3935.5
40°	5033.7	4868.6	4676.7	4135.0	3989.5	4034.5	4052.4	4145.5	4240.0	4174.0	4150.0
42.5°	6247.5	6052.4	5743.4	4729.1	4279.1	4301.5	4315.0	4396.0	4529.6	4477.1	4483.0
45°	7329.3	7258.7	6943.7	5743.4	4820.7	4709.7	4726.2	4768.2	4964.7	4945.2	4984.2
47.5°	8160.4	8119.9	7876.9	6907.7	5735.9	5209.3	5255.8	5275.3	5558.9	5627.9	5732.9
50°	8799.6	8784.7	8567.1	7942.9	6931.7	5945.9	5962.4	5920.4	6345.1	6516.0	6715.6
52.5°	9402.7	9453.8	9293.3	8904.7	8208.5	6910.7	6907.7	6709.6	7282.7	7540.8	7881.4
55°	9947.4	9965.4	9981.9	9885.9	9492.8	8008.9	7980.4	7656.3	8370.6	8637.6	9006.7
57.5°	10459.0	10466.5	10613.6	10810.1	10829.6	9188.2	9135.7	8747.1	9558.8	9749.4	9975.9
60°	10802.6	10837.1	11147.7	11693.8	11932.3	10405.0	10376.5	9980.4	10768.1	10856.6	10814.6
62.5°	10307.5	10517.5	11300.7	12383.9	12973.6	11753.8	11740.3	11368.3	12040.4	11968.4	11608.3
65°	8343.5	8699.1	10076.5	12850.6	13995.4	13260.2	13279.7	12883.6	13347.2	13113.1	12253.5
67.5°	5836.5	6211.5	7840.8	12888.1	15137.1	15029.1	15141.6	14520.5	14735.1	14209.9	12406.5
70°	4035.9	4229.6	5290.2	12080.9	16026.9	17465.7	17462.7	16531.0	16115.4	14709.6	11626.3
72.5°	2714.2	2814.6	3435.8	9584.3	15372.7	18913.5	18826.5	18067.4	16580.5	13756.8	9498.8
75°	1144.8	1218.3	1590.4	5386.3	12161.9	17303.6	17068.1	15966.8	14732.0	10832.6	5926.4
77.5°	363.1	394.6	627.2	1927.9	6699.1	13006.6	12757.6	9971.4	9873.8	5434.3	2166.5
80°	172.5	201.0	352.6	774.2	2636.1	7074.2	7039.7	4523.6	4247.5	1467.4	435.1
82.5°	75.0	88.6	195.1	414.1	1179.3	2523.7	2574.6	1539.3	1273.8	556.7	133.6
85°	24.0	31.5	90.0	190.5	498.2	627.2	619.6	366.1	513.1	303.1	46.5
87.5°	0.0	0.0	30.0	43.5	51.0	36.0	40.5	31.5	142.6	84.0	16.5
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: P966625  
 CATALOG NUMBER: NAV-SB4C-727-U-T4W-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2408.0	2408.0	2408.0	2408.0	2408.0	2408.0	2408.0	2408.0	2408.0	2408.0	2408.0
2.5°	2420.1	2396.0	2354.0	2315.1	2280.5	2246.1	2225.1	2195.0	2192.1	2192.1	2199.5
5°	2436.6	2397.6	2322.5	2243.0	2151.5	2064.5	1977.4	1893.5	1866.4	1846.9	1856.0
7.5°	2484.6	2423.1	2304.5	2153.0	1979.0	1788.4	1654.9	1510.8	1455.4	1425.4	1429.9
10°	2553.6	2469.6	2289.5	2024.0	1741.9	1482.4	1291.8	1135.8	1075.7	1050.2	1050.2
12.5°	2630.1	2526.6	2262.6	1863.4	1482.4	1171.8	985.7	913.7	904.8	904.8	904.8
15°	2721.7	2595.6	2216.0	1674.4	1210.8	927.2	861.2	864.2	873.2	879.2	879.2
17.5°	2816.2	2669.1	2142.6	1462.9	970.8	834.2	835.7	840.2	847.7	853.7	853.7
20°	2918.2	2742.7	2045.0	1237.8	832.7	807.2	811.7	816.2	822.2	825.2	826.7
22.5°	3027.7	2811.7	1929.5	1017.2	786.2	784.6	786.2	790.7	798.2	798.2	801.2
25°	3144.8	2888.2	1797.4	856.7	762.2	762.2	765.2	768.1	774.2	774.2	775.7
27.5°	3264.8	2958.7	1657.9	772.6	741.2	739.6	739.6	744.2	747.2	748.7	750.2
30°	3396.8	3041.3	1518.3	754.7	724.7	717.2	712.7	715.7	718.6	720.2	723.1
32.5°	3531.8	3120.7	1393.8	762.2	708.2	694.6	679.7	676.7	676.7	682.6	687.2
35°	3681.9	3207.7	1297.9	787.7	699.2	661.6	637.7	624.1	625.7	634.7	639.2
37.5°	3861.9	3312.8	1227.3	810.2	693.2	624.1	585.2	568.7	558.1	568.7	565.6
40°	4097.4	3467.4	1176.3	828.2	685.6	580.7	528.1	501.1	481.6	487.6	484.6
42.5°	4444.1	3710.4	1156.8	829.7	669.1	529.6	469.7	433.6	405.1	406.6	400.6
45°	4930.1	4094.5	1257.3	810.2	633.1	474.2	408.1	360.1	342.0	337.5	331.6
47.5°	5596.3	4654.1	1489.8	769.7	580.7	420.1	348.1	307.6	294.1	286.6	282.1
50°	6489.1	5372.7	1747.9	724.7	528.1	369.1	298.6	273.1	264.0	256.6	255.0
52.5°	7524.3	6101.9	1959.5	679.7	475.6	324.1	267.1	252.0	244.6	238.5	237.1
55°	8474.1	6604.6	1947.5	631.6	424.6	288.0	244.6	235.5	226.5	220.6	217.5
57.5°	9065.2	6675.1	1605.4	579.1	366.1	259.5	223.6	217.5	207.0	199.6	198.0
60°	9336.7	6273.0	1125.2	510.1	307.6	232.6	201.0	198.0	184.5	174.0	171.1
62.5°	9386.2	5525.9	750.2	424.6	256.6	207.0	178.6	174.0	156.0	138.1	129.0
65°	9185.2	4457.6	519.2	331.6	219.0	180.1	153.0	144.0	124.5	106.5	100.6
67.5°	8549.0	3129.7	361.6	238.5	186.0	142.6	121.6	118.5	103.5	88.6	84.0
70°	7383.3	1783.9	241.6	178.6	147.0	97.5	96.0	99.0	84.0	72.1	66.0
72.5°	5660.9	816.2	150.1	130.5	100.6	66.0	76.6	78.0	64.5	54.0	48.0
75°	3332.3	349.6	94.5	84.0	51.0	43.5	55.6	57.0	43.5	34.5	30.0
77.5°	1134.3	132.0	60.1	49.5	25.5	24.0	36.0	36.0	24.0	13.5	10.5
80°	258.1	49.5	30.0	19.5	12.0	10.5	12.0	10.5	6.0	1.5	0.0
82.5°	73.5	19.5	12.0	7.5	4.5	4.5	1.5	0.0	0.0	0.0	0.0
85°	21.0	9.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.0	1.5	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)