

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: P968729

Luminaire Tested: **NAV-SB5C-727-U-T3R**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P968729  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5C-727-U-T3R  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 36923.6 lumens  
Efficiency: N/A  
Efficacy: 148.0 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G4

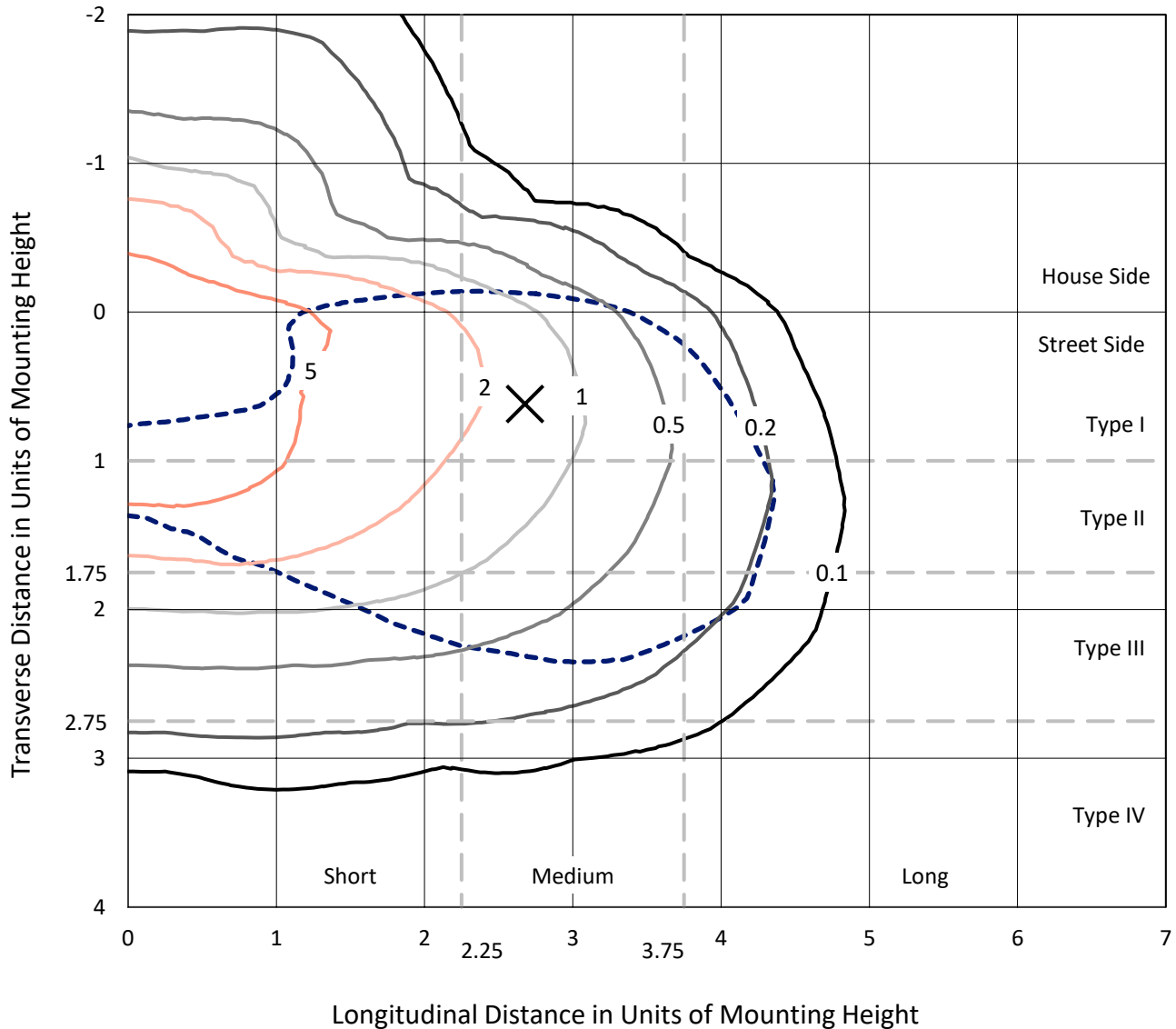
Input Watts (W): 249.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P968729  
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### Iso-Footcandle Lines of Horizontal Illumination

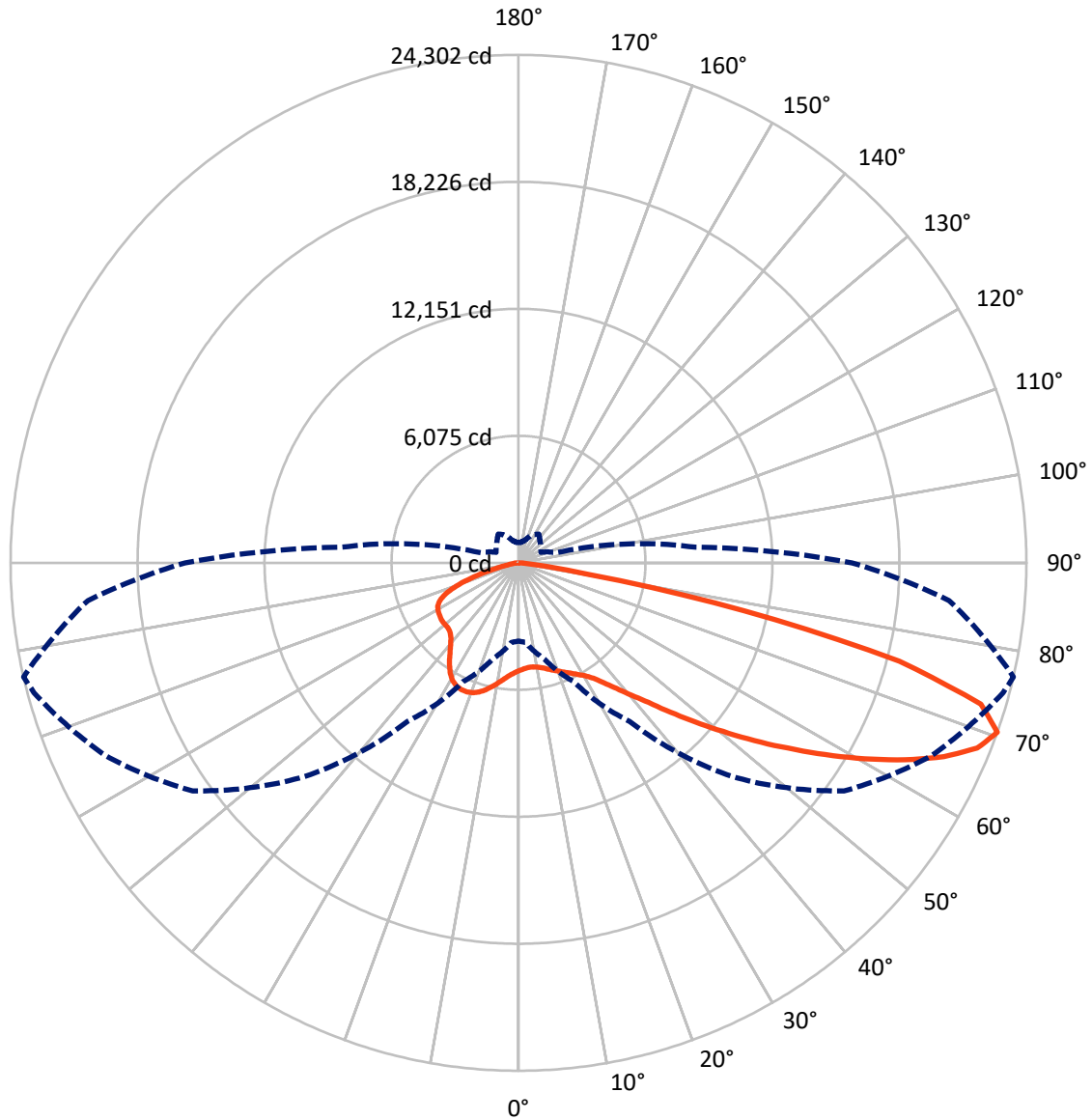
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.8 fc  
 Type III - Medium - N/A

REPORT NUMBER: P968729  
CATALOG NUMBER: NAV-SB5C-727-U-T3R

### Luminous Intensity Polar Plot



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

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 CATALOG NUMBER: NAV-SB5C-727-U-T3R

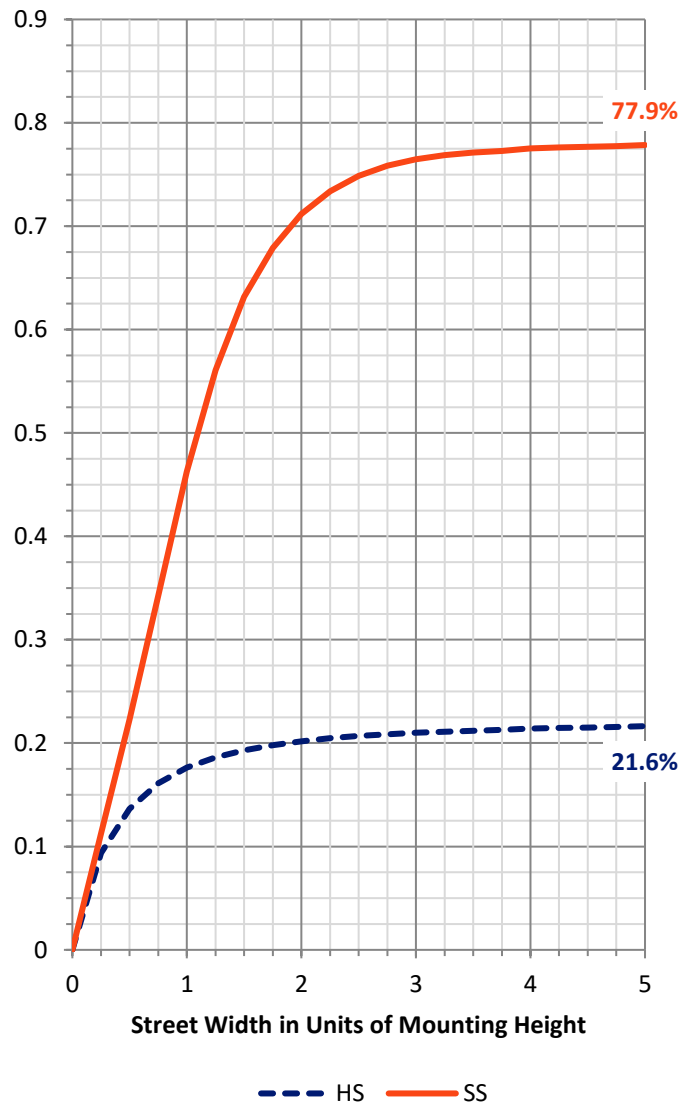
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8085.7	0.0	8085.7
	% Fixture	21.9	0.0	21.9
<b>Street Side</b>	Lumens	28837.9	0.0	28837.9
	% Fixture	78.1	0.0	78.1
<b>Total</b>	Lumens	36923.6	0.0	36923.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	491.3	1.3
10°-20°	1417.9	3.8
20°-30°	2424.8	6.6
30°-40°	3899.3	10.6
40°-50°	6087.9	16.5
50°-60°	8131.9	22.0
60°-70°	8667.4	23.5
70°-80°	5335.6	14.5
80°-90°	467.5	1.3
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°	36923.6	100.0
0°-180°	36923.6	100.0

**Coefficient of Utilization**



REPORT NUMBER: P968729

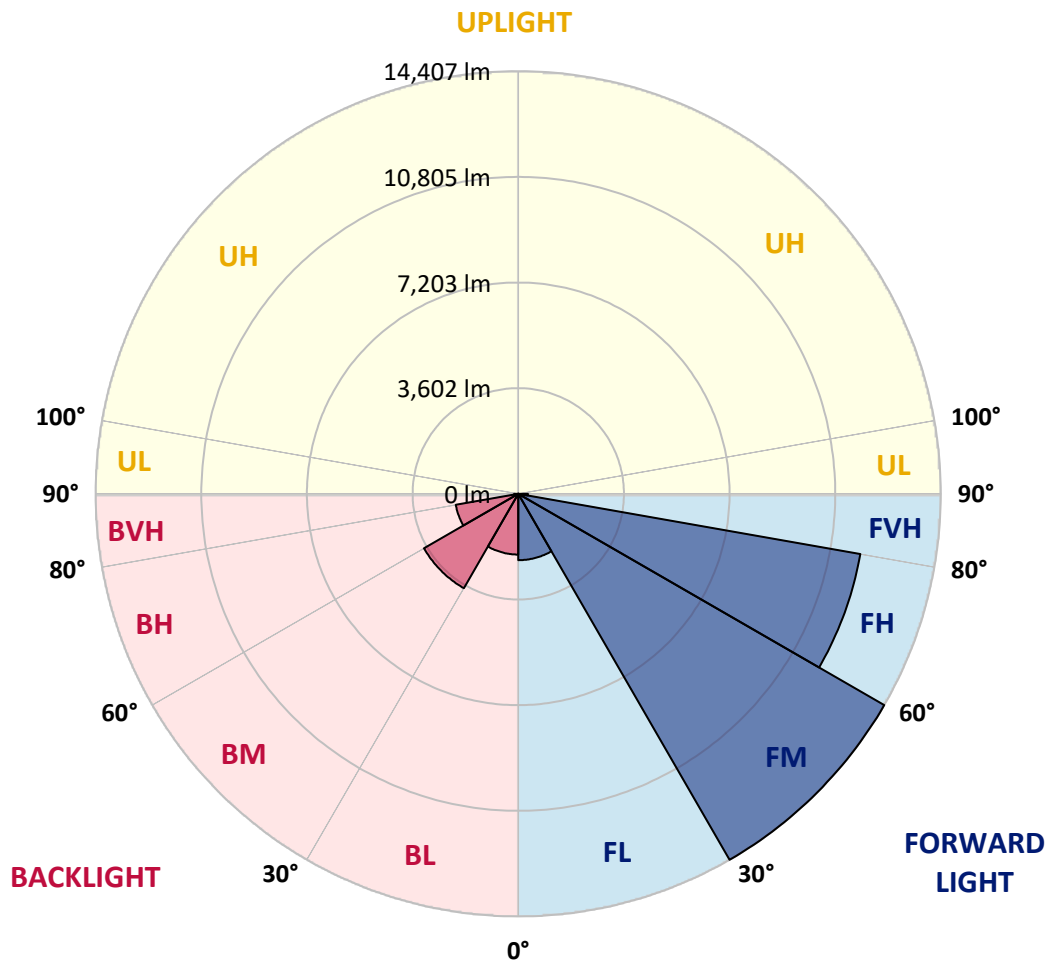
CATALOG NUMBER: NAV-SB5C-727-U-T3R

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2262.2	6.1			
FM (30°-60°)	14406.8	39.0			
FH (60°-80°)	11842.0	32.1			G4/12000
FVH (80°-90°)	326.9	0.9			G3/500
BL (0°-30°)	2071.8	5.6	B3/2500		
BM (30°-60°)	3712.3	10.1	B3/5000		
BH (60°-80°)	2161.0	5.9	B3/2500		G3/2500
BVH (80°-90°)	140.6	0.4			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type III Medium



REPORT NUMBER: P968729  
 CATALOG NUMBER: NAV-SB5C-727-U-T3R

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1
2.5°	4748.4	4746.5	4771.1	4778.7	4824.1	4856.1	4916.7	4981.0	5064.2	5073.6	5124.7
5°	4474.2	4474.2	4502.5	4532.9	4591.4	4655.8	4748.4	4859.9	5003.6	5026.4	5153.1
7.5°	4241.6	4256.7	4281.3	4340.0	4408.0	4500.7	4642.5	4801.3	4990.4	5026.4	5230.6
10°	4054.4	4071.4	4101.6	4148.9	4251.1	4379.6	4564.9	4769.2	5022.6	5079.3	5344.0
12.5°	3995.8	4012.8	4029.8	4065.8	4160.3	4311.6	4532.9	4784.3	5100.1	5156.9	5499.1
15°	4131.9	4152.7	4139.5	4130.0	4179.2	4317.2	4547.9	4839.1	5196.5	5277.8	5690.1
17.5°	4445.8	4453.4	4423.1	4334.2	4326.7	4400.4	4619.8	4914.8	5317.6	5406.5	5883.0
20°	4952.6	4939.4	4877.0	4701.1	4600.9	4585.7	4742.7	5028.2	5442.4	5536.9	6091.1
22.5°	5641.0	5625.8	5501.0	5223.0	4999.8	4852.3	4920.5	5175.7	5582.4	5688.2	6293.4
25°	6499.5	6478.7	6295.2	5917.0	5571.0	5206.0	5162.5	5370.5	5754.5	5852.7	6505.2
27.5°	7501.8	7484.8	7286.1	6786.9	6287.7	5690.1	5463.1	5599.4	5934.0	6045.7	6743.5
30°	8579.7	8628.8	8277.1	7740.0	7108.4	6321.7	5867.9	5881.1	6166.7	6266.8	7032.7
32.5°	9846.7	9931.7	9508.1	8827.3	7965.1	7008.1	6378.5	6274.4	6505.2	6588.4	7397.7
35°	11102.3	11198.7	10847.0	10094.3	9101.6	7817.6	6911.7	6726.4	6955.2	7046.0	7881.8
37.5°	12187.8	12316.3	12134.8	11480.5	10317.4	8793.3	7607.7	7257.8	7509.3	7622.7	8532.3
40°	13044.4	13241.1	13227.8	12819.4	11750.9	9977.0	8490.7	7914.0	8197.6	8320.5	9320.9
42.5°	13740.2	13910.5	14058.0	14037.2	13246.7	11321.6	9528.9	8766.8	8982.4	9124.2	10207.8
45°	14220.5	14402.1	14719.8	15062.1	14685.8	12760.7	10718.4	9778.5	9975.2	10188.9	11264.9
47.5°	14649.8	14855.9	15268.2	15810.9	15907.4	14205.5	12021.3	10956.6	11136.3	11357.5	12325.7
50°	14687.6	14865.4	15504.6	16274.2	16775.4	15593.4	13420.6	12278.5	12446.8	12683.1	13462.2
52.5°	13774.3	14054.2	15169.9	16261.0	17174.4	16754.5	14810.5	13653.3	13842.3	14126.0	14638.5
55°	10691.9	11102.3	14188.5	15754.2	17032.5	17505.3	16132.4	15115.1	15357.1	15654.0	15822.3
57.5°	9209.3	9389.0	11263.0	14831.3	16385.9	17700.1	17248.1	16591.9	16981.5	17306.7	17074.1
60°	8277.1	8426.4	9534.6	13396.0	15534.8	17391.8	18110.4	17968.6	18641.8	19029.4	18354.4
62.5°	7278.6	7420.4	8428.4	11185.4	14445.6	16879.4	18655.0	19239.4	20343.8	20767.3	19560.9
65°	6287.7	6408.7	7375.1	9398.4	13061.4	16366.9	18936.8	20338.0	21919.0	22357.7	20563.1
67.5°	5183.3	5283.6	6196.9	7929.1	11378.3	15665.3	19076.8	21202.2	23289.9	23666.3	21058.5
70°	3740.4	3818.0	4761.6	6270.6	9266.1	14458.9	19020.0	21815.0	24001.0	24301.6	20684.1
72.5°	1768.1	1838.1	2946.3	4071.4	6544.8	12110.2	17872.2	21328.9	23278.7	23129.2	18392.2
75°	943.6	1004.1	1692.5	2233.3	3456.8	8301.7	14625.2	18373.3	19547.6	18821.5	13592.7
77.5°	639.2	686.4	1047.7	1340.7	1579.0	3940.9	9400.4	12721.0	12238.8	11039.9	6807.7
80°	506.8	556.0	858.5	907.7	763.9	1423.9	3884.1	5888.7	4230.3	3383.0	1936.4
82.5°	389.6	444.4	722.4	658.0	416.0	584.4	1130.9	1862.6	1083.5	824.5	468.9
85°	238.3	296.9	567.3	419.8	234.5	266.6	383.9	518.1	331.0	276.1	168.3
87.5°	121.1	170.1	287.4	153.1	105.9	62.4	102.1	102.1	87.0	75.6	43.5
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: P968729  
 CATALOG NUMBER: NAV-SB5C-727-U-T3R

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1	5151.1
2.5°	5170.1	5207.9	5272.2	5332.7	5380.0	5425.3	5470.7	5495.3	5502.9	5533.2	5550.2
5°	5230.6	5300.6	5425.3	5542.6	5616.4	5661.8	5693.9	5712.8	5716.6	5726.1	5741.1
7.5°	5342.2	5453.7	5627.8	5744.9	5799.8	5796.1	5782.7	5735.5	5716.6	5699.6	5703.4
10°	5499.1	5646.6	5860.3	5941.6	5907.6	5816.8	5699.6	5561.5	5497.3	5434.9	5415.9
12.5°	5693.9	5881.1	6091.1	6087.3	5919.0	5686.3	5414.0	5202.2	5068.0	4971.6	4948.8
15°	5930.2	6145.9	6306.6	6178.0	5809.3	5391.3	4992.4	4716.2	4595.2	4489.3	4477.9
17.5°	6174.2	6404.9	6478.7	6149.7	5533.2	4954.5	4502.5	4285.1	4165.9	4109.2	4126.2
20°	6412.5	6641.3	6580.8	5987.0	5113.3	4459.1	4056.2	3937.1	3912.5	3925.7	3920.1
22.5°	6664.0	6868.2	6601.6	5673.1	4578.2	3952.3	3731.0	3734.8	3789.6	3829.3	3838.8
25°	6921.2	7059.3	6546.8	5219.3	4003.3	3579.7	3524.9	3585.4	3693.2	3770.8	3791.5
27.5°	7169.0	7229.4	6427.7	4657.6	3509.8	3313.1	3322.5	3447.4	3609.9	3717.8	3744.2
30°	7448.8	7380.7	6198.8	4026.0	3167.5	3084.2	3163.7	3309.3	3472.0	3568.3	3591.1
32.5°	7764.6	7511.2	5835.7	3441.6	2925.5	2900.9	3031.3	3125.8	3197.7	3226.1	3241.3
35°	8157.9	7694.6	5370.5	3031.3	2707.9	2766.6	2891.4	2844.1	2815.8	2800.6	2815.8
37.5°	8668.5	7942.3	4825.9	2764.7	2532.1	2670.1	2721.2	2573.7	2462.2	2407.3	2420.5
40°	9283.1	8305.4	4302.1	2558.6	2420.5	2586.9	2498.0	2320.3	2178.4	2100.9	2106.6
42.5°	9965.8	8685.5	3861.5	2403.5	2358.1	2518.8	2333.5	2121.8	1893.0	1868.4	1893.0
45°	10682.4	9077.0	3560.8	2284.4	2327.9	2460.2	2239.0	1896.7	1734.1	1834.3	1887.2
47.5°	11399.1	9436.3	3379.3	2195.4	2312.7	2394.1	2155.8	1771.9	1656.5	1802.2	1870.2
50°	12197.2	9757.7	3297.9	2131.2	2295.7	2367.5	2030.9	1739.7	1575.2	1671.7	1743.5
52.5°	12989.5	10007.4	3237.5	2066.9	2271.1	2346.7	1970.5	1701.9	1476.9	1482.6	1522.3
55°	13780.0	10169.9	3171.2	1981.8	2216.3	2301.4	1964.8	1660.3	1403.1	1376.7	1395.5
57.5°	14623.4	10262.6	3090.0	1887.2	2121.8	2186.0	1959.1	1628.2	1380.5	1337.0	1342.6
60°	15481.9	10398.8	2984.1	1771.9	1995.1	2048.0	1945.9	1616.8	1367.2	1293.4	1299.2
62.5°	16251.6	10446.1	2857.4	1662.2	1832.4	1911.8	1917.5	1607.4	1331.3	1204.6	1204.6
65°	16756.5	10241.8	2636.1	1537.4	1656.5	1771.9	1862.6	1575.2	1267.0	1140.3	1140.3
67.5°	16735.7	9659.4	2290.1	1376.7	1486.4	1616.8	1783.3	1520.4	1189.4	1060.9	1066.5
70°	15956.6	8509.7	1851.4	1189.4	1299.2	1450.4	1681.1	1439.1	1096.8	973.9	985.2
72.5°	13685.4	6660.2	1344.5	970.1	1081.7	1278.4	1548.8	1340.7	1002.2	896.4	890.7
75°	9776.7	4215.1	911.4	745.1	841.5	1083.5	1384.3	1225.4	915.2	900.2	849.1
77.5°	4994.2	2013.9	603.2	544.6	586.2	854.7	1163.0	1094.9	928.5	743.1	661.8
80°	1624.4	743.1	380.1	370.6	389.6	569.2	900.2	898.2	703.5	504.9	446.3
82.5°	518.1	319.6	247.7	238.3	228.8	357.4	627.8	711.0	474.7	319.6	317.6
85°	206.1	191.0	145.7	134.3	96.5	168.3	329.0	472.7	353.6	230.7	236.4
87.5°	75.6	75.6	39.7	28.4	20.8	56.7	88.9	141.9	202.3	119.1	117.3
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)