

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: McGRAW-EDISON

Report Number: P453652

Luminaire Tested: **GALN-SA4D-722-U-SL4**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453652  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4D-722-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 2200K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22021 lumens  
Efficiency: N/A  
Efficacy: 89.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G4

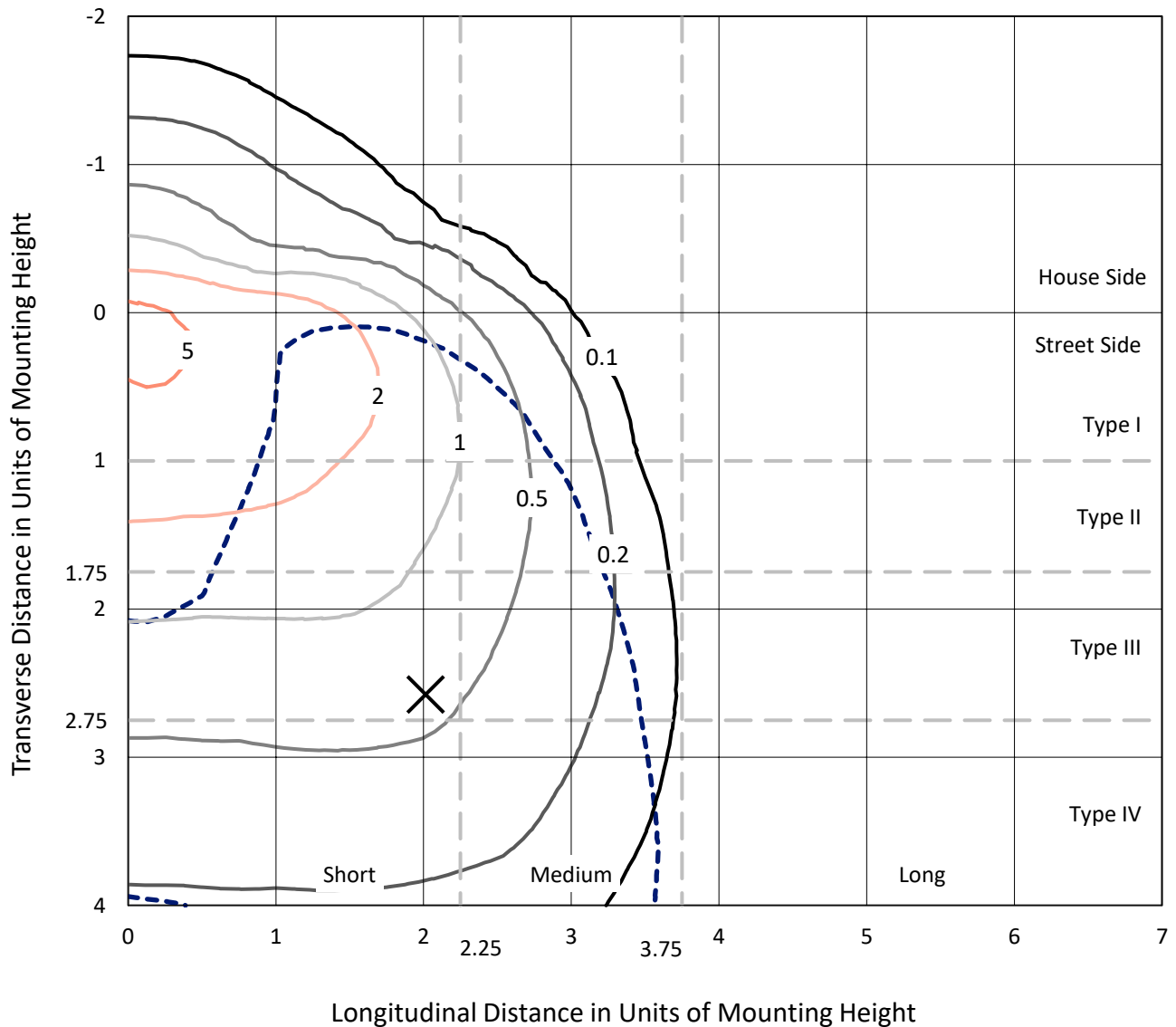
Input Watts (W): 245  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

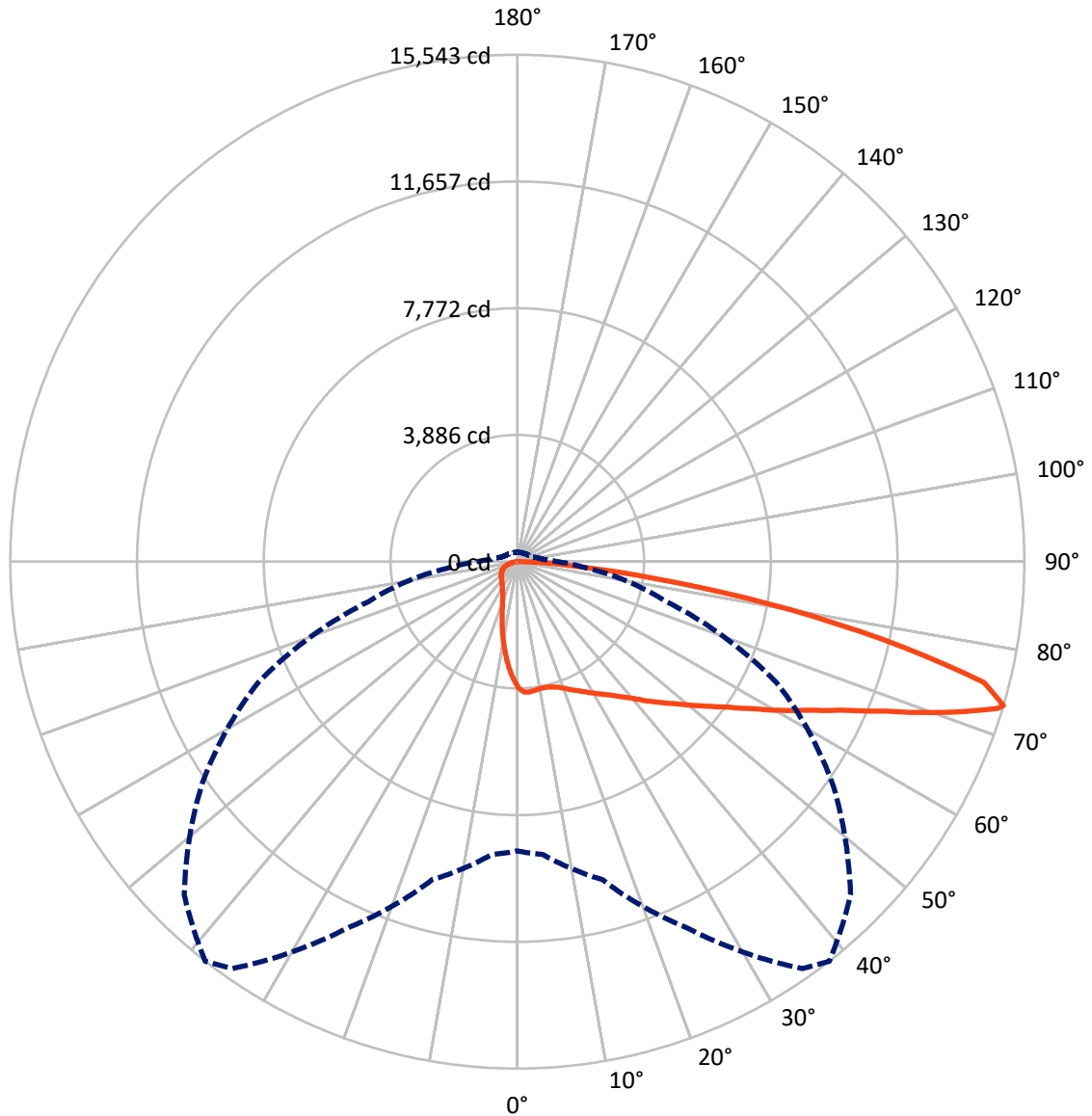
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral    - - - Horizontal Cone Through 73-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2960.3	0.0	2960.3
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	19060.7	0.0	19060.7
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	22021.0	0.0	22021.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	337.7	1.5
10°-20°	866.0	3.9
20°-30°	1348.5	6.1
30°-40°	1977.9	9.0
40°-50°	2934.0	13.3
50°-60°	4156.9	18.9
60°-70°	5273.1	23.9
70°-80°	4389.5	19.9
80°-90°	737.5	3.3
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°	22021.0	100.0
0°-180°	22021.0	100.0

**Coefficient of Utilization**



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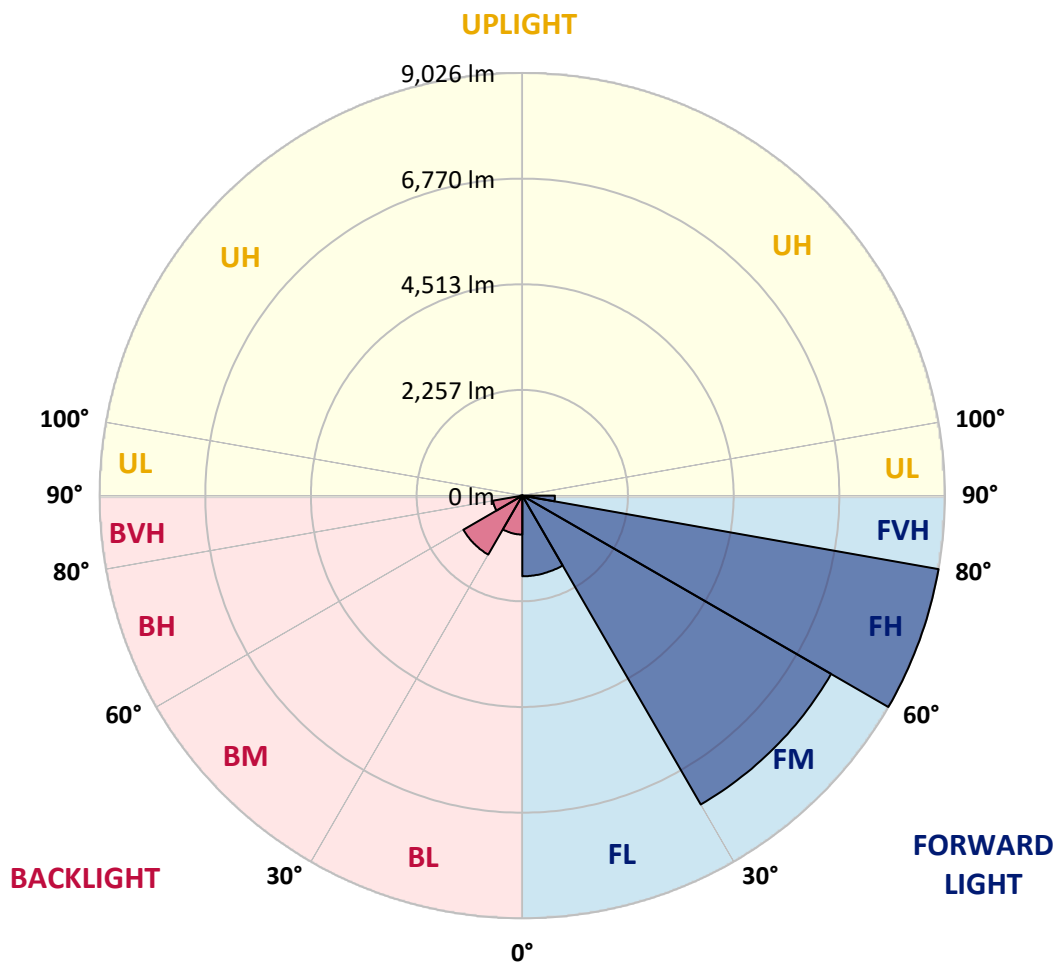
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1721.4	7.8			
FM	(30°-60°)	7615.5	34.6			
FH	(60°-80°)	9026.3	41.0			G4/12000
FVH	(80°-90°)	697.5	3.2			G4/750
BL	(0°-30°)	830.7	3.8	B2/1000		
BM	(30°-60°)	1453.3	6.6	B2/2500		
BH	(60°-80°)	636.3	2.9	B2/1000		G2/1000
BVH	(80°-90°)	40.0	0.2			G1/100
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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	3868.7	3868.7	3868.7	3868.7	3868.7	3868.7	3868.7	3868.7	3868.7	3868.7	3868.7
2.5°	4024.2	4044.1	4034.1	4020.4	4011.7	4003.0	3990.6	3954.5	3925.9	3894.8	3846.3
5°	4054.0	4066.4	4057.7	4040.3	4020.4	4011.7	3988.1	3940.8	3894.8	3842.6	3770.5
7.5°	4036.6	4041.6	4031.6	4010.5	3993.1	3976.9	3949.5	3897.3	3841.4	3777.9	3683.4
10°	3974.4	3993.1	3993.1	3975.7	3958.3	3949.5	3922.2	3872.4	3821.5	3749.3	3637.4
12.5°	3923.4	3943.3	3959.5	3954.5	3953.3	3953.3	3932.1	3894.8	3835.1	3766.7	3633.7
15°	3888.6	3912.2	3947.1	3967.0	3979.4	3983.1	3974.4	3942.1	3881.2	3801.6	3648.6
17.5°	3881.2	3909.8	3973.2	4016.7	4049.0	4047.8	4045.3	4000.5	3933.4	3851.3	3667.3
20°	3914.7	3952.0	4040.3	4108.7	4156.0	4147.3	4133.6	4075.1	3996.8	3904.8	3684.7
22.5°	4015.5	4054.0	4151.0	4225.6	4271.6	4271.6	4230.6	4153.5	4070.2	3967.0	3708.3
25°	4159.7	4202.0	4305.2	4381.1	4402.2	4386.0	4345.0	4251.7	4156.0	4056.5	3758.0
27.5°	4336.3	4387.3	4483.0	4546.5	4540.2	4527.8	4485.5	4366.1	4270.4	4179.6	3842.6
30°	4556.4	4593.7	4693.2	4708.1	4685.7	4683.2	4623.6	4504.2	4414.6	4345.0	3963.2
32.5°	4764.1	4797.7	4877.2	4883.5	4843.7	4848.6	4792.7	4683.2	4632.3	4607.4	4165.9
35°	4984.2	5001.6	5070.0	5062.5	5036.4	5032.7	5010.3	4905.8	4922.0	4966.8	4453.2
37.5°	5168.2	5203.1	5241.6	5247.8	5246.6	5259.0	5273.9	5224.2	5317.5	5458.0	4830.0
40°	5337.4	5367.2	5424.4	5444.3	5492.8	5517.7	5568.7	5569.9	5785.0	6016.3	5293.8
42.5°	5451.8	5502.8	5609.7	5645.8	5763.9	5838.5	5914.4	5995.2	6307.3	6604.5	5841.0
45°	5551.3	5618.4	5796.2	5908.2	6068.6	6159.4	6319.8	6488.9	6937.8	7327.1	6396.9
47.5°	5701.7	5761.4	5965.4	6163.1	6405.6	6510.0	6750.0	7002.5	7589.4	8016.0	6929.1
50°	5910.6	5946.7	6154.4	6476.5	6786.1	6920.4	7237.5	7601.9	8285.8	8696.2	7396.7
52.5°	6178.0	6192.9	6358.3	6787.4	7195.2	7361.9	7782.2	8207.5	8895.2	9286.9	7767.3
55°	6493.9	6469.0	6598.3	7116.9	7662.8	7880.4	8331.9	8820.6	9580.4	9764.4	8037.1
57.5°	6806.0	6767.5	6870.7	7517.3	8239.8	8502.2	9028.2	9452.3	10192.2	10210.9	8226.2
60°	7136.8	7108.2	7231.3	7987.4	8947.4	9258.3	9744.5	10107.7	10784.2	10521.8	8256.0
62.5°	7476.3	7430.3	7605.6	8515.9	9744.5	10026.8	10498.1	10804.1	11364.9	10637.4	7968.7
65°	7805.8	7784.7	8055.8	9143.9	10652.3	10973.2	11430.8	11638.5	11830.0	10463.3	7256.2
67.5°	8156.5	8198.8	8631.6	9982.1	11836.2	12239.1	12732.8	12537.6	11963.1	9638.8	6110.9
70°	8691.2	8718.6	9387.6	11080.1	13362.1	13848.3	14087.1	12857.2	11321.4	8073.2	4593.7
72.5°	8921.3	9041.9	10062.9	12232.9	15095.6	15392.8	14542.2	12144.6	9431.2	5484.1	2413.8
73°	8870.3	9014.6	10094.0	12408.2	15231.1	15543.3	14445.2	11777.8	8767.1	4723.0	2069.3
75°	8234.9	8412.7	9689.8	12261.5	14967.5	14781.0	12885.8	10038.0	5924.3	2147.6	942.6
77.5°	6497.6	6548.6	7677.7	9901.2	11786.5	11440.8	9643.8	6273.8	2420.0	798.4	534.7
80°	3259.4	3447.1	4327.6	5671.9	7881.7	7768.5	6087.2	2967.1	1008.5	468.8	354.4
82.5°	1568.1	1701.2	2107.8	2765.7	4354.9	4251.7	3014.4	1621.6	640.4	273.6	208.9
85°	1009.8	1109.3	1341.8	1319.4	1790.7	1709.9	1354.2	1227.4	379.3	143.0	145.5
87.5°	666.5	730.0	875.5	700.1	651.6	589.4	598.2	691.4	74.6	54.7	19.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3868.7	3868.7	3868.7	3868.7	3868.7	3868.7	3868.7	3868.7	3868.7	3868.7	3868.7
2.5°	3826.4	3810.3	3756.8	3704.6	3654.8	3607.6	3576.5	3535.4	3508.1	3515.5	3526.7
5°	3730.7	3694.6	3600.1	3508.1	3421.0	3317.8	3234.5	3167.3	3116.4	3097.7	3094.0
7.5°	3630.0	3569.0	3433.5	3275.5	3127.6	2999.5	2851.5	2778.1	2692.3	2662.5	2652.5
10°	3569.0	3486.9	3296.7	3076.6	2854.0	2641.3	2480.9	2350.3	2232.2	2209.8	2198.6
12.5°	3551.6	3443.4	3187.2	2903.7	2607.7	2346.6	2109.1	1937.5	1823.1	1796.9	1758.4
15°	3541.7	3407.4	3085.3	2729.6	2354.1	2035.7	1785.8	1585.5	1481.1	1411.4	1412.7
17.5°	3533.0	3366.3	2970.9	2539.4	2135.2	1768.3	1492.3	1312.0	1216.2	1178.9	1175.2
20°	3520.5	3317.8	2839.0	2339.1	1885.2	1524.6	1274.6	1140.3	1075.7	1044.6	1043.3
22.5°	3515.5	3270.6	2709.7	2135.2	1663.9	1336.8	1130.4	1035.9	994.8	973.7	973.7
25°	3528.0	3237.0	2574.2	1941.2	1467.4	1176.4	1030.9	966.2	942.6	931.4	927.7
27.5°	3566.5	3222.1	2439.9	1747.2	1287.1	1067.0	963.8	919.0	901.6	892.9	894.1
30°	3639.9	3220.8	2308.0	1555.7	1152.8	983.7	910.3	879.2	865.5	860.5	859.3
32.5°	3758.0	3248.2	2178.7	1397.8	1039.6	914.0	860.5	838.2	831.9	828.2	827.0
35°	3958.3	3325.3	2050.6	1253.5	952.6	851.8	813.3	802.1	793.4	797.1	798.4
37.5°	4228.1	3458.3	1928.8	1140.3	886.7	805.8	773.5	763.5	758.6	762.3	766.0
40°	4590.0	3649.8	1826.8	1049.6	839.4	767.3	738.7	730.0	725.0	731.2	732.5
42.5°	4989.2	3871.2	1742.2	978.7	800.9	734.9	707.6	697.6	693.9	697.6	698.9
45°	5399.5	4128.6	1698.7	927.7	768.5	711.3	682.7	671.5	662.8	660.3	664.1
47.5°	5803.7	4352.5	1697.5	896.6	742.4	690.2	659.1	646.7	635.5	629.2	628.0
50°	6133.2	4530.3	1727.3	882.9	720.0	666.5	635.5	623.0	608.1	595.7	598.2
52.5°	6382.0	4645.9	1741.0	876.7	707.6	641.7	610.6	599.4	582.0	565.8	565.8
55°	6542.4	4673.3	1707.4	870.5	697.6	615.6	582.0	572.0	554.6	538.5	538.5
57.5°	6597.1	4588.7	1586.8	855.6	687.7	593.2	553.4	544.7	531.0	514.8	512.3
60°	6470.2	4302.7	1375.4	810.8	667.8	569.6	522.3	518.6	513.6	499.9	498.7
62.5°	5981.5	3695.9	1145.3	752.4	634.2	544.7	493.7	499.9	503.6	496.2	494.9
65°	5168.2	3000.7	978.7	671.5	589.4	509.9	462.6	478.8	488.7	488.7	486.2
67.5°	4192.0	2304.3	824.5	601.9	533.5	462.6	427.8	440.2	447.7	445.2	451.4
70°	2979.6	1560.7	671.5	522.3	462.6	409.1	383.0	383.0	378.0	375.6	375.6
72.5°	1445.0	891.6	544.7	436.5	394.2	349.4	328.3	319.6	309.6	308.4	302.2
73°	1207.5	799.6	519.8	420.3	378.0	340.7	317.1	303.4	297.2	292.2	291.0
75°	734.9	606.9	434.0	354.4	322.1	293.5	272.3	259.9	253.7	250.0	248.7
77.5°	483.7	452.7	337.0	271.1	246.2	228.8	220.1	207.7	203.9	199.0	199.0
80°	360.6	345.7	241.3	191.5	176.6	161.7	159.2	156.7	146.7	140.5	138.0
82.5°	232.5	246.2	164.1	128.1	111.9	99.5	100.7	104.5	94.5	85.8	83.3
85°	165.4	177.8	99.5	58.4	47.3	41.0	46.0	41.0	42.3	33.6	27.4
87.5°	27.4	47.3	17.4	7.5	3.7	2.5	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)