

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: P190970

Luminaire Tested: **GLEON-AF-02-LED-E1-AFL**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P190970  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-02-LED-E1-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12780.7 lumens  
Efficiency: N/A  
Efficacy: 113.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B2 - U0 - G2

Input Watts (W): 113  
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: 25 FT

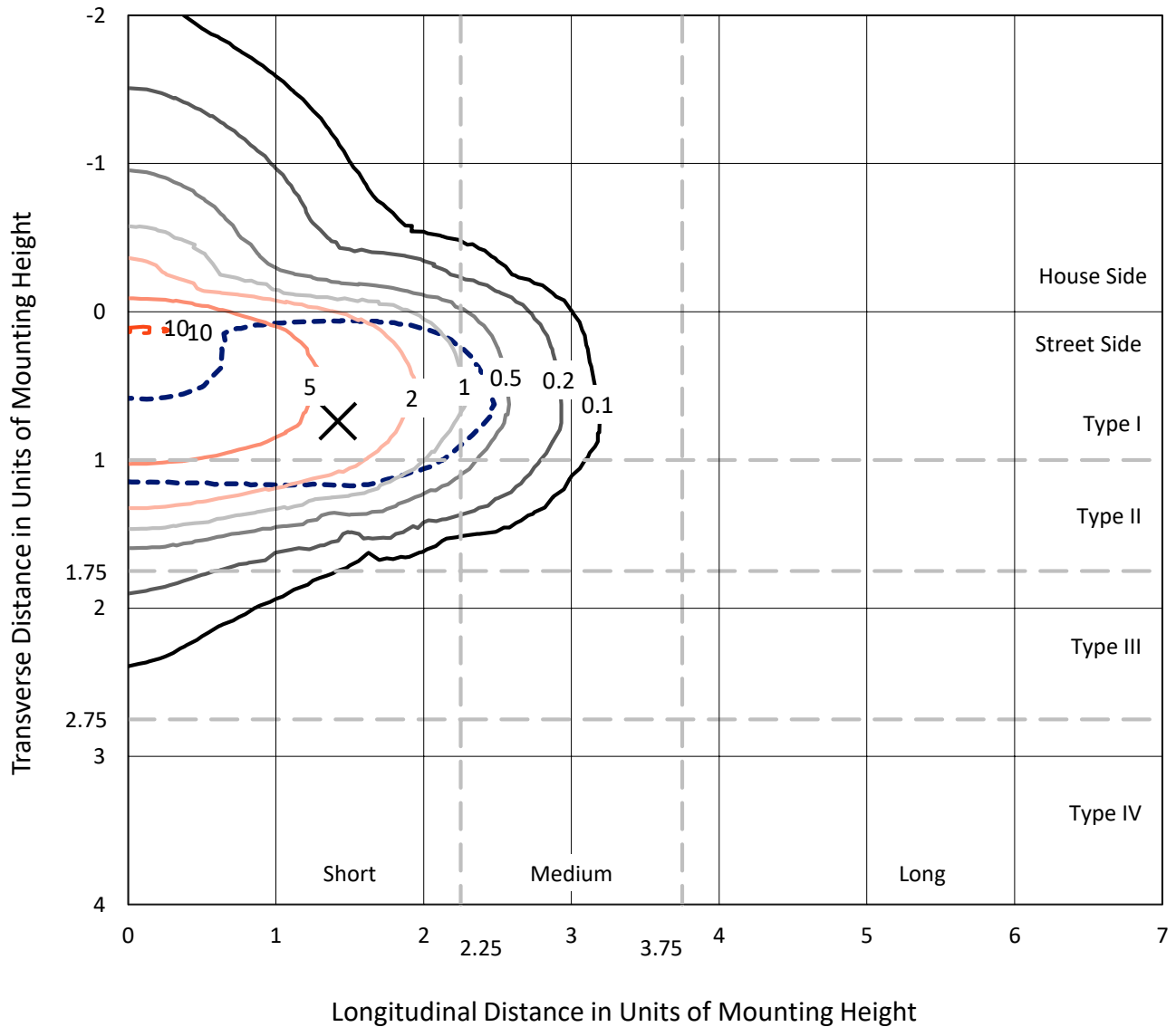


REPORT NUMBER: P190970

CATALOG NUMBER: GLEON-AF-02-LED-E1-AFL

### Iso-Footcandle Lines of Horizontal Illumination

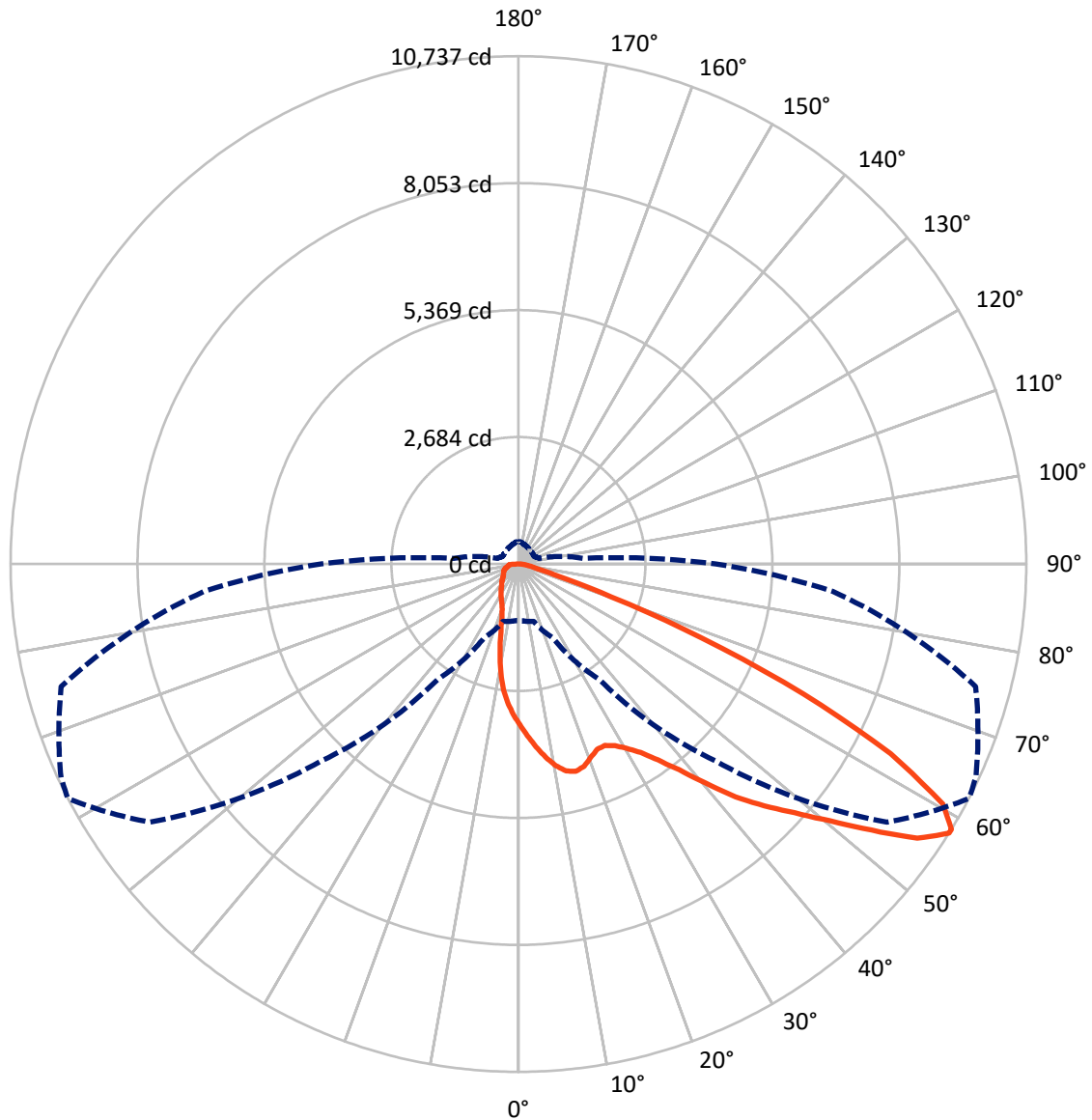
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 10.3 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P190970  
CATALOG NUMBER: GLEON-AF-02-LED-E1-AFL

### Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral    - - - Horizontal Cone Through 58-Deg Vertical

REPORT NUMBER: P190970

CATALOG NUMBER: GLEON-AF-02-LED-E1-AFL

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1949.1	0.0	1949.1
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	10831.6	0.0	10831.6
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	12780.7	0.0	12780.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	303.6	2.4
10°-20°	776.1	6.1
20°-30°	1254.6	9.8
30°-40°	1991.7	15.6
40°-50°	2914.3	22.8
50°-60°	3048.1	23.8
60°-70°	1800.8	14.1
70°-80°	507.3	4.0
80°-90°	184.2	1.4
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°	12780.7	100.0
0°-180°	12780.7	100.0



REPORT NUMBER: P190970

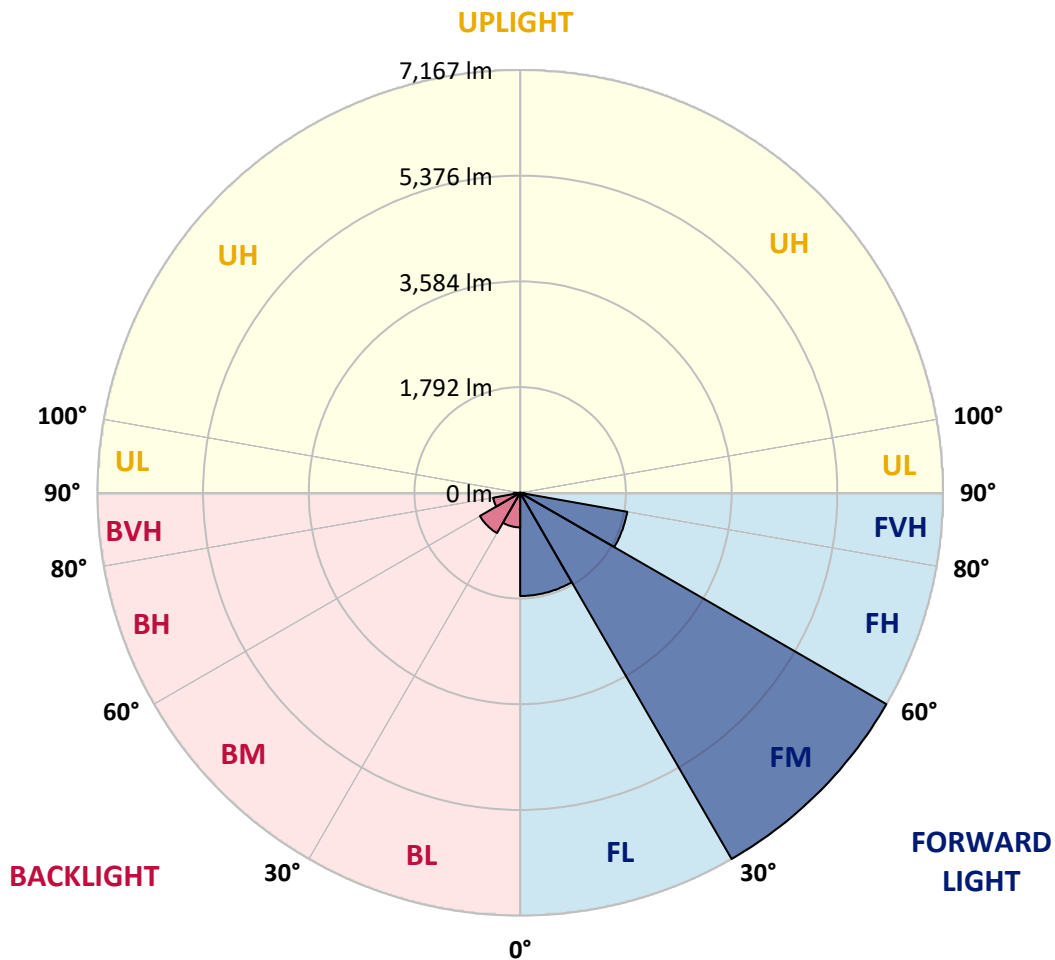
CATALOG NUMBER: GLEON-AF-02-LED-E1-AFL

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1748.6	13.7			
FM (30°-60°)	7167.4	56.1			
FH (60°-80°)	1843.0	14.4			G2/5000
FVH (80°-90°)	72.7	0.6			G1/100
BL (0°-30°)	585.8	4.6	B2/1000		
BM (30°-60°)	786.7	6.2	B1/1000		
BH (60°-80°)	465.1	3.6	B1/500		G1/500
BVH (80°-90°)	111.5	0.9			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





REPORT NUMBER: P190970

CATALOG NUMBER: GLEON-AF-02-LED-E1-AFL

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0
2.5°	3879.4	3848.1	3828.3	3810.8	3788.0	3739.2	3673.6	3632.1	3611.0	3539.4	3454.5
5°	4259.8	4232.0	4211.6	4188.2	4147.2	4070.8	3964.9	3880.7	3839.1	3695.8	3526.1
7.5°	4170.7	4182.1	4217.6	4279.6	4332.6	4322.4	4227.9	4120.8	4066.0	3866.8	3609.2
10°	3633.8	3653.8	3715.2	3860.2	4094.9	4335.6	4409.0	4335.1	4279.6	4035.8	3694.7
12.5°	3526.1	3525.5	3530.4	3568.9	3708.5	4047.3	4415.1	4489.7	4456.6	4197.2	3782.0
15°	3570.1	3571.3	3567.6	3583.9	3627.3	3761.5	4230.9	4549.3	4572.7	4359.7	3872.2
17.5°	3685.6	3682.6	3668.8	3668.8	3684.5	3736.7	4014.3	4493.9	4602.3	4503.5	3951.7
20°	3879.4	3865.6	3828.9	3795.1	3778.3	3806.6	3925.2	4366.3	4551.1	4629.3	4017.2
22.5°	4114.1	4103.3	4043.7	3971.5	3913.1	3912.5	3970.9	4255.0	4462.6	4747.8	4072.6
25°	4417.5	4400.0	4311.5	4195.9	4093.6	4054.6	4070.8	4249.5	4414.4	4876.6	4122.0
27.5°	4773.7	4741.9	4637.1	4470.4	4319.9	4241.2	4217.6	4347.6	4458.4	5036.2	4190.6
30°	5205.9	5169.2	5035.0	4817.7	4605.2	4475.8	4425.9	4521.5	4604.0	5230.6	4300.7
32.5°	5697.5	5644.6	5489.4	5249.8	4970.5	4773.2	4691.9	4751.5	4817.1	5464.6	4438.5
35°	6377.1	6313.9	6089.3	5758.9	5443.6	5172.1	5042.1	5085.5	5149.3	5813.7	4637.8
37.5°	6840.5	6812.1	6662.9	6352.3	6009.3	5696.9	5495.9	5521.3	5557.4	6250.0	4892.9
40°	6836.3	6847.6	6850.7	6853.7	6620.1	6321.0	6105.0	6078.5	6071.3	6729.1	5183.0
42.5°	6493.8	6540.7	6692.3	7000.0	7141.9	7004.8	6806.7	6730.3	6692.3	7293.6	5490.5
45°	5969.6	5994.9	6279.0	6879.5	7409.1	7681.8	7532.0	7291.2	7222.6	7812.4	5745.7
47.5°	5699.4	5727.1	5905.8	6560.6	7406.2	8228.9	8315.6	7857.0	7734.1	8263.8	5966.0
50°	5056.0	5113.8	5338.9	6005.7	7135.9	8480.5	9134.6	8531.0	8277.0	8703.2	6186.8
52.5°	3874.6	3963.6	4215.9	5093.3	6450.4	8355.9	9790.0	9348.2	8989.6	9158.1	6376.5
55°	2444.0	2510.2	2722.1	3597.2	5160.2	7707.7	10038.6	10232.4	9913.4	9589.0	6540.7
57.5°	1328.8	1358.4	1437.8	1986.1	3356.4	6274.7	9676.3	10735.6	10603.1	9954.9	6664.7
58°	1189.2	1209.1	1258.4	1721.2	2976.7	5882.9	9515.6	10737.3	10671.1	10008.4	6674.3
60°	882.3	872.1	828.1	982.2	1656.9	4064.2	8544.2	10307.6	10502.0	10074.1	6627.4
62.5°	775.2	750.4	660.8	650.6	805.9	1872.3	6537.7	8829.5	9288.7	9699.7	6342.1
65°	728.2	701.7	586.2	548.9	581.3	792.0	3851.1	6622.0	7197.9	8564.7	5612.7
67.5°	693.4	659.0	538.7	487.4	489.9	523.5	1543.7	4170.7	4818.9	6502.8	4365.7
70°	659.6	622.3	498.3	439.4	425.5	414.1	613.9	2087.7	2675.7	4107.6	2783.4
72.5°	623.5	586.8	462.8	401.4	374.3	336.4	400.8	854.0	1192.9	1943.3	1262.6
75°	571.1	538.1	427.3	367.8	329.2	278.7	302.7	446.0	535.0	774.0	608.5
77.5°	506.8	479.7	387.6	340.0	291.8	226.3	232.9	309.3	343.0	442.9	361.7
80°	364.1	373.8	344.8	305.8	260.0	183.5	178.7	225.7	243.8	284.7	235.3
82.5°	255.7	261.2	285.3	249.8	214.8	144.4	131.8	158.9	169.7	187.2	126.9
85°	176.4	170.3	195.6	173.9	155.3	96.3	90.2	107.7	114.4	116.1	65.6
87.5°	105.9	105.9	113.1	93.3	83.7	49.9	48.8	61.4	65.6	62.6	36.1
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: P190970

CATALOG NUMBER: GLEON-AF-02-LED-E1-AFL

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0
2.5°	3404.0	3361.2	3270.4	3197.5	3105.5	3009.7	2956.2	2899.0	2860.0	2831.6	2876.7
5°	3429.9	3342.6	3154.8	2976.7	2779.9	2575.3	2420.0	2275.6	2175.0	2112.4	2171.4
7.5°	3470.8	3336.6	3037.4	2732.9	2379.7	2039.0	1734.5	1543.7	1432.3	1377.6	1411.9
10°	3517.7	3326.9	2899.7	2402.5	1897.0	1467.8	1240.4	1163.3	1138.0	1127.8	1132.6
12.5°	3556.8	3306.5	2730.6	2002.9	1424.6	1159.1	1093.5	1091.7	1097.1	1098.3	1100.2
15°	3584.5	3276.4	2479.5	1586.4	1139.3	1056.2	1052.6	1063.5	1073.7	1077.9	1080.3
17.5°	3603.1	3214.4	2196.1	1254.2	1020.7	1006.3	1014.7	1028.6	1039.3	1042.4	1044.7
20°	3601.4	3123.5	1858.5	1046.0	956.4	956.4	970.8	981.6	982.2	978.6	980.4
22.5°	3582.7	2999.0	1531.1	935.3	899.2	909.4	923.8	913.6	871.5	843.7	845.6
25°	3551.4	2850.2	1250.7	864.8	846.2	864.2	860.0	783.0	722.8	695.7	695.7
27.5°	3523.8	2674.5	1035.1	803.4	793.2	815.5	740.8	671.1	645.8	633.1	628.9
30°	3503.9	2485.0	891.3	744.5	743.3	727.0	642.7	623.5	619.3	609.1	605.5
32.5°	3508.7	2292.9	799.2	692.7	696.9	622.3	595.8	600.1	596.4	585.5	580.7
35°	3548.4	2110.7	739.1	645.8	633.1	562.1	568.1	575.9	574.8	559.7	554.8
37.5°	3619.4	1937.9	699.3	606.6	552.5	532.0	541.7	553.7	550.7	540.4	536.8
40°	3694.1	1775.4	666.9	575.9	504.9	511.6	520.0	526.6	529.6	532.7	530.2
42.5°	3766.9	1605.7	627.1	544.6	485.1	492.3	495.9	502.6	518.7	530.2	529.6
45°	3810.2	1446.2	586.2	500.1	469.4	473.6	471.3	484.5	504.3	523.0	523.5
47.5°	3858.4	1322.3	553.7	459.2	454.4	457.4	450.2	463.4	481.5	504.3	506.8
50°	3916.8	1248.2	527.8	426.7	433.9	433.9	432.1	444.2	469.4	495.9	500.7
52.5°	3983.0	1233.8	506.2	403.2	413.5	412.9	414.7	432.7	460.4	486.3	490.5
55°	4063.6	1272.9	482.6	385.8	393.6	396.0	402.0	422.5	446.0	475.5	477.2
57.5°	4157.5	1352.3	464.0	371.9	375.5	383.4	393.0	411.6	436.9	469.4	471.3
58°	4173.1	1369.2	461.0	370.7	371.9	380.9	391.8	409.9	435.2	470.7	472.4
60°	4173.7	1425.2	454.4	365.3	358.1	373.2	385.1	403.2	432.1	474.9	479.0
62.5°	4025.6	1424.6	449.6	357.5	343.6	362.3	376.1	397.2	429.1	485.1	493.5
65°	3544.8	1294.5	426.7	345.5	332.3	352.7	368.4	393.0	437.5	529.6	535.0
67.5°	2772.6	1061.0	384.0	328.6	317.2	343.0	363.6	392.4	446.5	539.8	543.5
70°	1833.2	793.8	337.1	309.3	301.6	331.6	365.9	412.9	436.3	518.2	508.5
72.5°	951.5	557.3	299.1	285.3	283.5	321.4	400.8	410.4	426.1	487.4	475.5
75°	499.5	387.0	266.0	258.8	261.8	319.0	473.0	399.7	412.9	466.5	489.3
77.5°	305.8	312.3	237.7	234.7	240.7	311.8	472.4	385.8	393.6	429.1	454.4
80°	204.6	253.4	216.0	216.7	220.9	285.3	424.3	364.1	370.1	405.6	431.5
82.5°	129.4	149.9	196.2	206.4	201.0	235.3	360.5	331.6	340.0	464.0	490.5
85°	65.6	93.9	170.3	198.6	181.2	164.9	292.5	290.7	294.9	334.6	349.6
87.5°	30.1	51.8	133.0	173.3	136.7	102.9	212.5	215.4	232.3	237.7	237.7
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)