

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: P299959

Luminaire Tested: **GLNA-AF-05-LED-E1-SL3-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299959
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24288)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-05-LED-E1-SL3-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Medium OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16970.5 lumens
Efficiency: N/A
Efficacy: 104.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G3

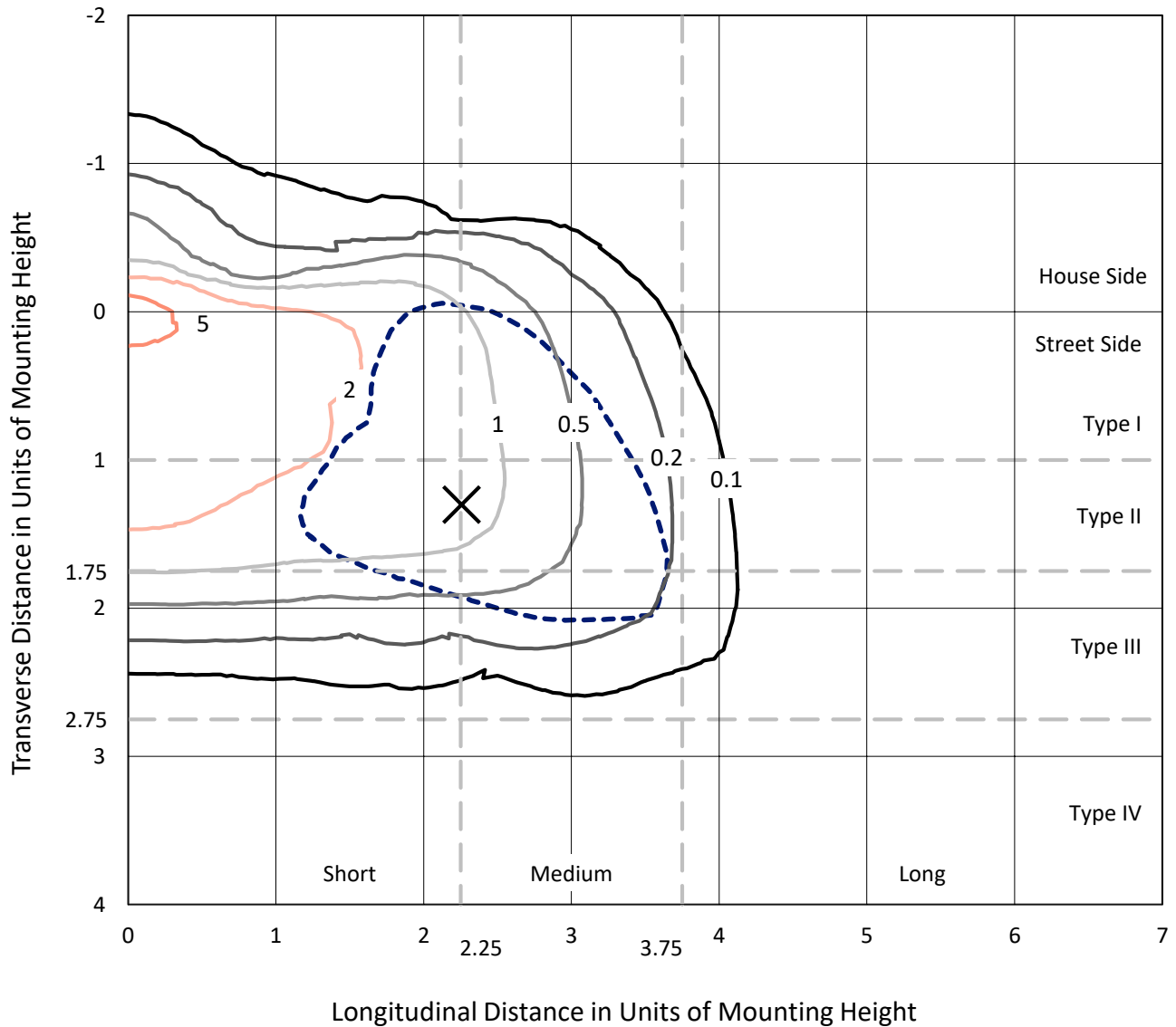
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

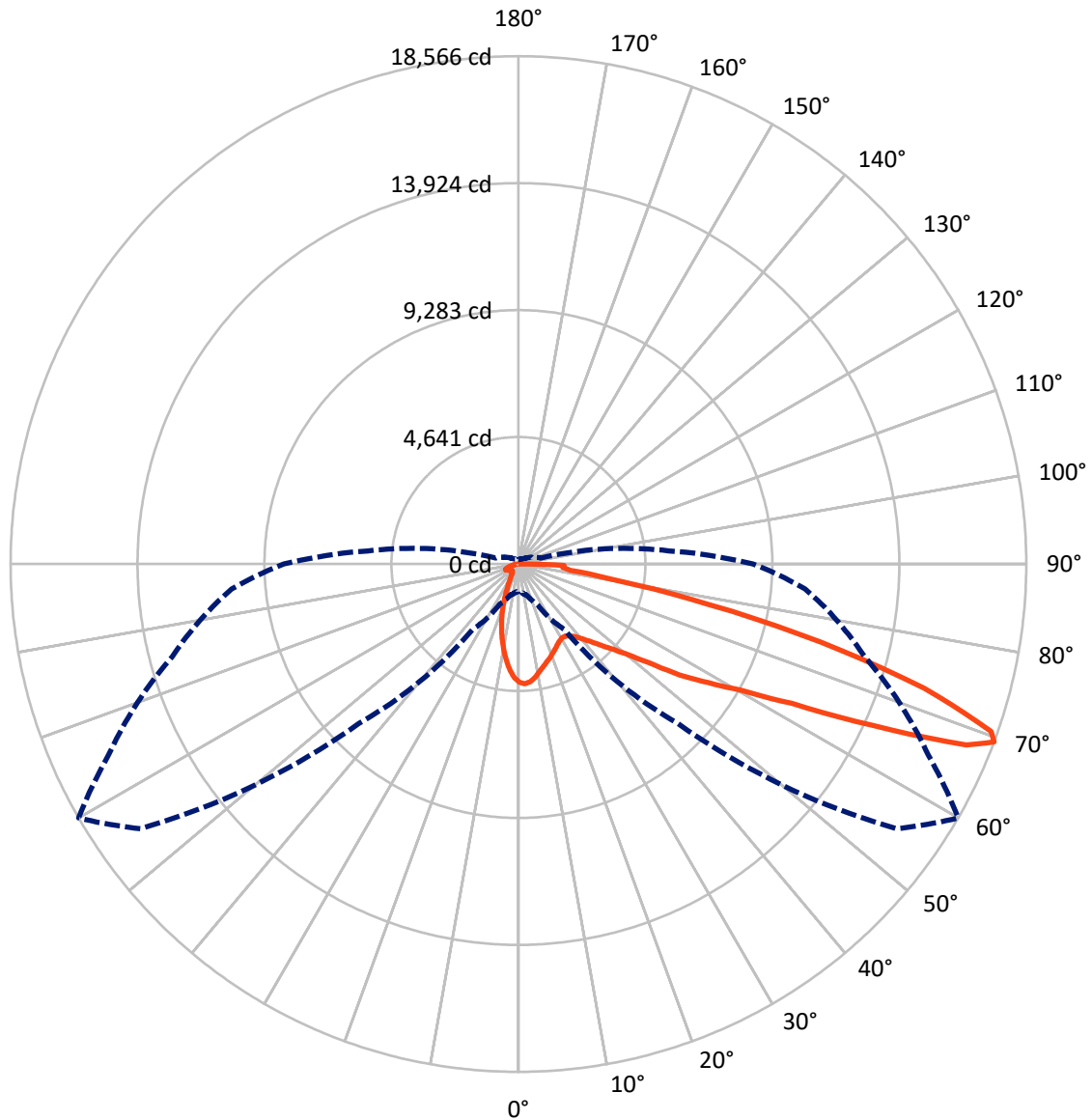
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2414.4	0.0	2414.4
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	14556.1	0.0	14556.1
	% Fixture	85.8	0.0	85.8
Total	Lumens	16970.5	0.0	16970.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	365.6	2.2
10°-20°	779.0	4.6
20°-30°	992.6	5.8
30°-40°	1364.6	8.0
40°-50°	2214.2	13.0
50°-60°	3550.9	20.9
60°-70°	4726.0	27.8
70°-80°	2551.7	15.0
80°-90°	425.8	2.5
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°	16970.5	100.0
0°-180°	16970.5	100.0

Coefficient of Utilization



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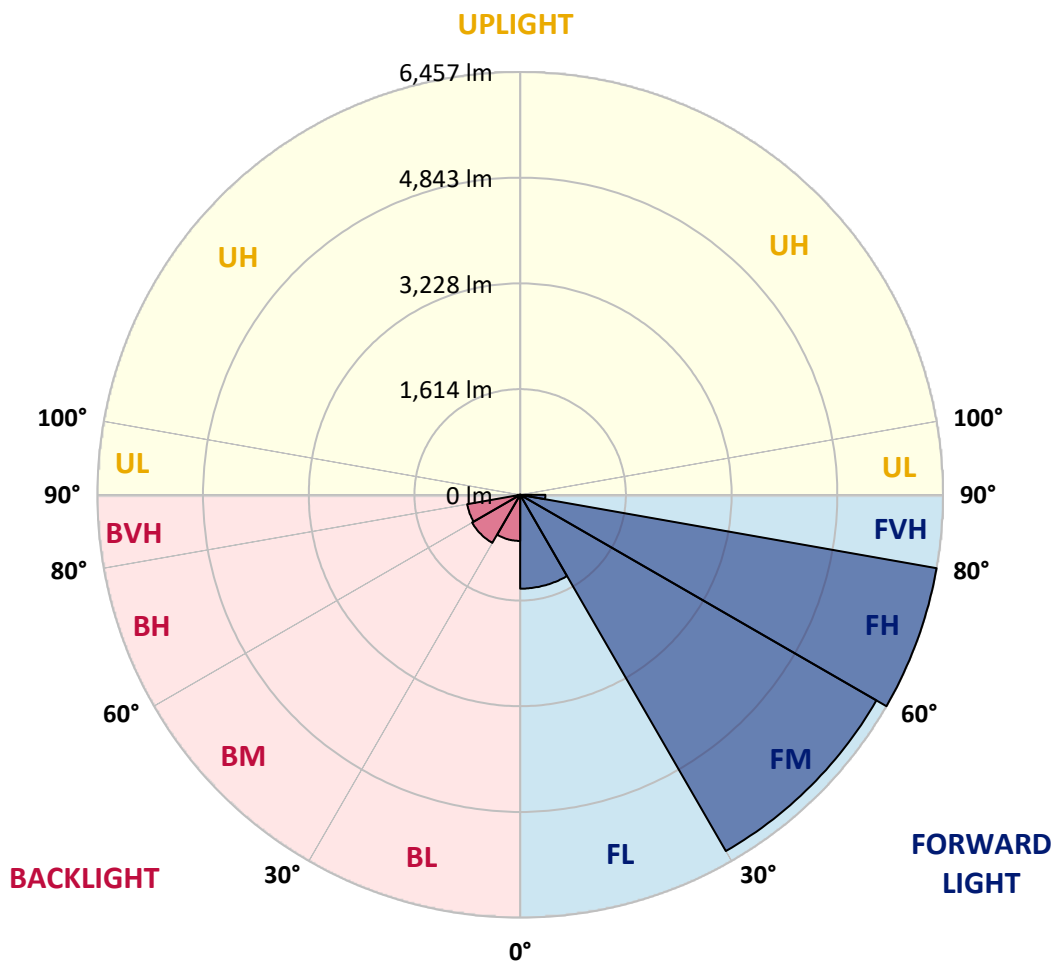
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1432.9	8.4			
FM (30°-60°)	6281.5	37.0			
FH (60°-80°)	6456.9	38.0			G3/7500
FVH (80°-90°)	384.8	2.3			G3/500
BL (0°-30°)	704.3	4.2	B2/1000		
BM (30°-60°)	848.2	5.0	B1/1000		
BH (60°-80°)	820.8	4.8	B2/1000		G2/1000
BVH (80°-90°)	41.0	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-G3

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	4324.3	4324.3	4324.3	4324.3	4324.3	4324.3	4324.3	4324.3	4324.3	4324.3	4324.3
2.5°	4412.9	4422.7	4418.6	4416.1	4423.5	4412.0	4388.3	4380.9	4369.4	4342.4	4296.5
5°	4247.3	4276.8	4275.1	4297.3	4334.2	4344.0	4333.3	4335.0	4313.7	4280.1	4203.8
7.5°	3961.2	3973.5	3980.0	4028.4	4095.6	4149.7	4195.6	4210.4	4200.5	4171.9	4073.5
10°	3666.0	3675.9	3691.5	3748.0	3833.3	3907.9	3994.8	4044.8	4066.1	4061.2	3951.3
12.5°	3412.7	3422.6	3443.1	3507.0	3608.7	3700.5	3826.7	3889.0	3939.9	3970.2	3852.1
15°	3185.7	3207.0	3226.6	3300.4	3414.4	3534.9	3677.5	3756.2	3834.9	3903.0	3764.4
17.5°	3008.6	3029.9	3041.4	3108.6	3229.9	3377.5	3544.7	3637.4	3735.7	3847.2	3677.5
20°	2906.1	2916.0	2911.0	2948.7	3057.8	3214.3	3412.7	3520.1	3639.0	3794.8	3590.6
22.5°	2877.4	2878.2	2860.2	2856.1	2926.6	3058.6	3271.7	3402.1	3548.0	3760.3	3516.0
25°	2947.1	2944.6	2895.5	2855.3	2862.7	2939.7	3135.7	3287.3	3471.8	3752.9	3458.6
27.5°	3102.0	3109.4	3036.5	2961.0	2886.4	2884.0	3032.4	3192.2	3409.5	3786.6	3434.1
30°	3319.3	3331.6	3253.7	3157.8	3017.6	2902.0	2992.2	3135.7	3370.9	3856.2	3430.0
32.5°	3557.0	3570.1	3511.1	3410.3	3226.6	3013.5	3020.1	3140.6	3369.3	3953.8	3457.8
35°	3810.3	3825.1	3794.8	3709.5	3505.4	3219.3	3126.6	3220.1	3422.6	4103.0	3532.4
37.5°	4093.2	4116.1	4124.3	4043.1	3825.1	3490.6	3301.2	3370.9	3543.1	4310.4	3669.3
40°	4500.6	4532.6	4530.1	4413.7	4191.5	3857.1	3571.0	3589.0	3730.8	4587.5	3888.2
42.5°	5281.0	5287.6	5083.4	4830.1	4594.9	4242.4	3889.0	3874.3	3989.9	4938.3	4210.4
45°	6273.8	6246.7	5792.6	5303.1	5016.2	4685.0	4303.0	4230.9	4318.6	5366.3	4613.7
47.5°	7097.6	7035.3	6461.5	5786.0	5462.2	5166.2	4789.1	4662.9	4711.3	5851.6	5135.1
50°	7383.7	7337.0	6861.5	6187.7	5884.4	5753.2	5387.6	5208.9	5222.0	6430.3	5745.8
52.5°	7322.3	7315.7	6998.4	6452.5	6279.5	6369.7	6235.2	5993.4	5865.5	7073.0	6404.9
55°	7177.2	7191.1	7076.3	6760.7	6731.2	6964.8	7342.8	7164.0	6766.4	7721.5	7086.2
57.5°	6673.0	6709.1	6961.6	7148.5	7458.3	7805.9	8234.7	8183.8	7736.2	8422.4	7896.1
60°	5376.1	5459.7	6136.9	7073.0	8206.8	9293.8	9485.7	9367.6	8736.4	9292.2	8965.9
62.5°	3766.9	3853.8	4658.8	6123.7	8083.8	10974.4	11722.0	11212.9	10172.6	10573.5	10350.5
65°	2016.7	2058.5	2673.3	4248.9	6824.7	11321.1	14990.5	14215.8	12446.7	12153.2	11535.1
67.5°	1112.4	1135.4	1370.7	2145.4	4371.1	9969.3	17072.7	17658.0	15288.9	13205.0	11319.5
69°	1005.9	1027.2	1181.3	1624.8	2925.0	8242.9	16869.4	18565.5	16534.9	13100.9	10522.7
70°	983.7	1003.4	1142.0	1497.7	2367.5	6794.3	16188.2	18333.5	16831.7	12727.9	9827.5
72.5°	885.4	906.7	1041.1	1345.3	2023.2	3387.3	12823.0	15501.2	15281.5	11035.9	7454.2
75°	825.5	845.2	1073.1	1317.4	1937.1	2143.7	8453.6	11424.4	11233.4	7719.8	4019.4
77.5°	353.3	351.7	497.6	1114.9	1965.8	2075.7	4542.4	7137.0	6511.5	3299.6	1154.2
80°	236.1	232.0	236.1	327.9	1802.7	2087.2	2379.8	3622.6	2736.4	841.1	568.9
82.5°	203.3	200.0	207.4	200.0	633.7	2382.3	2023.2	1926.5	1301.0	477.9	282.0
85°	136.9	131.2	178.7	179.5	299.2	2116.7	2279.0	1627.3	1052.6	283.6	139.4
87.5°	65.6	63.9	104.1	127.1	175.4	859.9	2556.9	1667.4	1061.6	145.1	66.4
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°	4324.3	4324.3	4324.3	4324.3	4324.3	4324.3	4324.3	4324.3	4324.3	4324.3	4324.3
2.5°	4282.5	4248.9	4216.1	4176.8	4135.8	4089.9	4066.9	4044.0	4038.2	4031.7	4008.7
5°	4164.5	4116.9	4034.9	3944.8	3849.7	3757.0	3686.5	3642.3	3608.7	3591.4	3561.1
7.5°	4012.0	3942.3	3798.9	3643.1	3483.2	3337.3	3211.1	3131.6	3056.1	3020.9	2980.7
10°	3866.9	3762.8	3539.8	3310.3	3080.7	2860.2	2652.8	2506.1	2375.7	2302.8	2251.1
12.5°	3742.3	3599.6	3290.6	2979.9	2665.1	2351.1	2040.4	1796.1	1592.0	1484.6	1429.7
15°	3621.0	3448.8	3053.7	2659.4	2255.2	1828.1	1419.9	1142.8	973.9	906.7	883.7
17.5°	3511.1	3290.6	2815.9	2336.4	1832.2	1315.7	954.2	801.7	737.0	714.8	707.5
20°	3392.2	3130.7	2569.2	1998.6	1391.2	919.8	745.2	678.0	651.7	645.2	641.9
22.5°	3277.5	2973.3	2333.1	1637.1	999.3	709.9	640.2	612.4	608.3	614.0	614.0
25°	3179.9	2832.3	2078.1	1259.2	733.7	597.6	573.0	566.5	582.0	603.4	607.5
27.5°	3107.0	2716.7	1806.8	929.6	584.5	519.7	518.9	529.6	568.1	609.1	617.3
30°	3057.0	2606.9	1516.6	670.6	490.2	457.4	470.6	493.5	550.1	608.3	623.9
32.5°	3031.5	2525.7	1214.1	518.9	419.7	401.7	423.8	451.7	507.4	561.5	582.0
35°	3051.2	2465.9	928.8	432.8	370.5	356.6	379.6	406.6	439.4	462.4	477.9
37.5°	3125.0	2442.1	700.9	387.8	336.9	323.8	341.8	357.4	370.5	377.1	384.5
40°	3284.0	2467.5	561.5	364.8	318.1	301.7	309.1	314.8	323.0	329.6	332.8
42.5°	3518.5	2543.8	503.3	355.8	308.2	284.5	282.8	285.3	295.9	308.2	310.7
45°	3846.4	2678.2	499.2	361.5	303.3	270.5	263.1	266.4	282.8	301.7	305.0
47.5°	4265.3	2883.2	532.0	378.7	307.4	263.1	250.9	255.0	275.4	300.9	305.0
50°	4772.7	3169.3	587.0	404.2	325.5	264.8	246.8	249.2	270.5	298.4	302.5
52.5°	5372.0	3575.1	646.8	428.7	344.3	275.4	250.0	244.3	264.0	288.6	293.5
55°	6038.5	4095.6	708.3	450.9	354.1	288.6	256.6	237.7	251.7	272.2	276.3
57.5°	6856.6	4823.6	814.9	472.2	360.7	297.6	263.1	231.2	236.1	250.9	254.1
60°	7964.1	5853.2	1002.6	507.4	375.5	300.9	262.3	225.4	220.5	228.7	230.4
62.5°	9291.4	6971.4	1159.2	551.7	400.1	303.3	257.4	221.3	207.4	207.4	209.0
65°	10079.2	7270.6	1072.3	588.6	420.5	300.9	251.7	217.2	197.6	188.5	189.4
67.5°	9411.1	6394.3	919.0	596.0	419.7	289.4	242.7	209.9	187.7	173.8	173.0
69°	8574.1	5517.1	850.1	576.3	400.1	274.6	231.2	201.7	180.4	165.6	164.8
70°	7899.4	4981.8	805.0	555.0	378.7	264.0	222.2	194.3	174.6	160.7	159.0
72.5°	5743.4	3264.4	687.8	477.1	312.3	221.3	191.8	170.5	155.8	147.6	145.9
75°	2870.0	1556.8	558.3	386.9	239.4	177.1	157.4	142.6	135.3	133.6	132.8
77.5°	942.7	713.2	399.2	288.6	177.9	138.5	127.1	116.4	114.8	119.7	118.0
80°	518.1	414.8	253.3	191.0	121.3	101.7	100.0	94.3	96.7	104.9	103.3
82.5°	264.0	215.6	156.6	114.8	82.0	73.0	79.5	76.2	79.5	86.9	86.1
85°	130.3	118.0	99.2	69.7	54.1	46.7	56.6	59.0	60.7	66.4	66.4
87.5°	75.4	69.7	52.5	32.8	27.1	24.6	32.8	32.0	37.7	41.0	40.2
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)