

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: P299995

Luminaire Tested: **GLNA-AF-05-LED-E1-SL3-7030-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299995
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194479)
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-SL3-7030-600-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14711.5 lumens
Efficiency: N/A
Efficacy: 90.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - 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

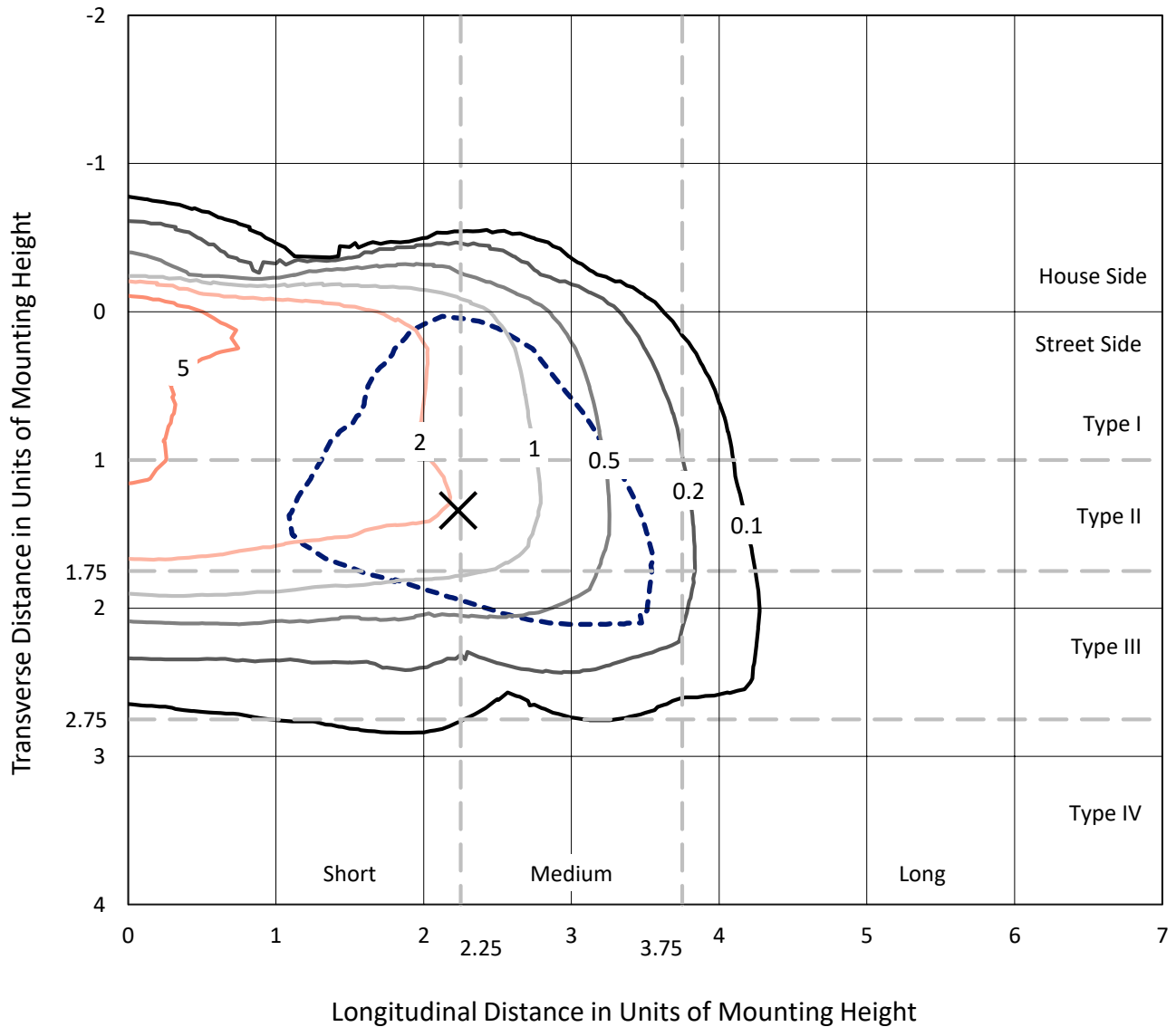


REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-05-LED-E1-SL3-7030-600-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

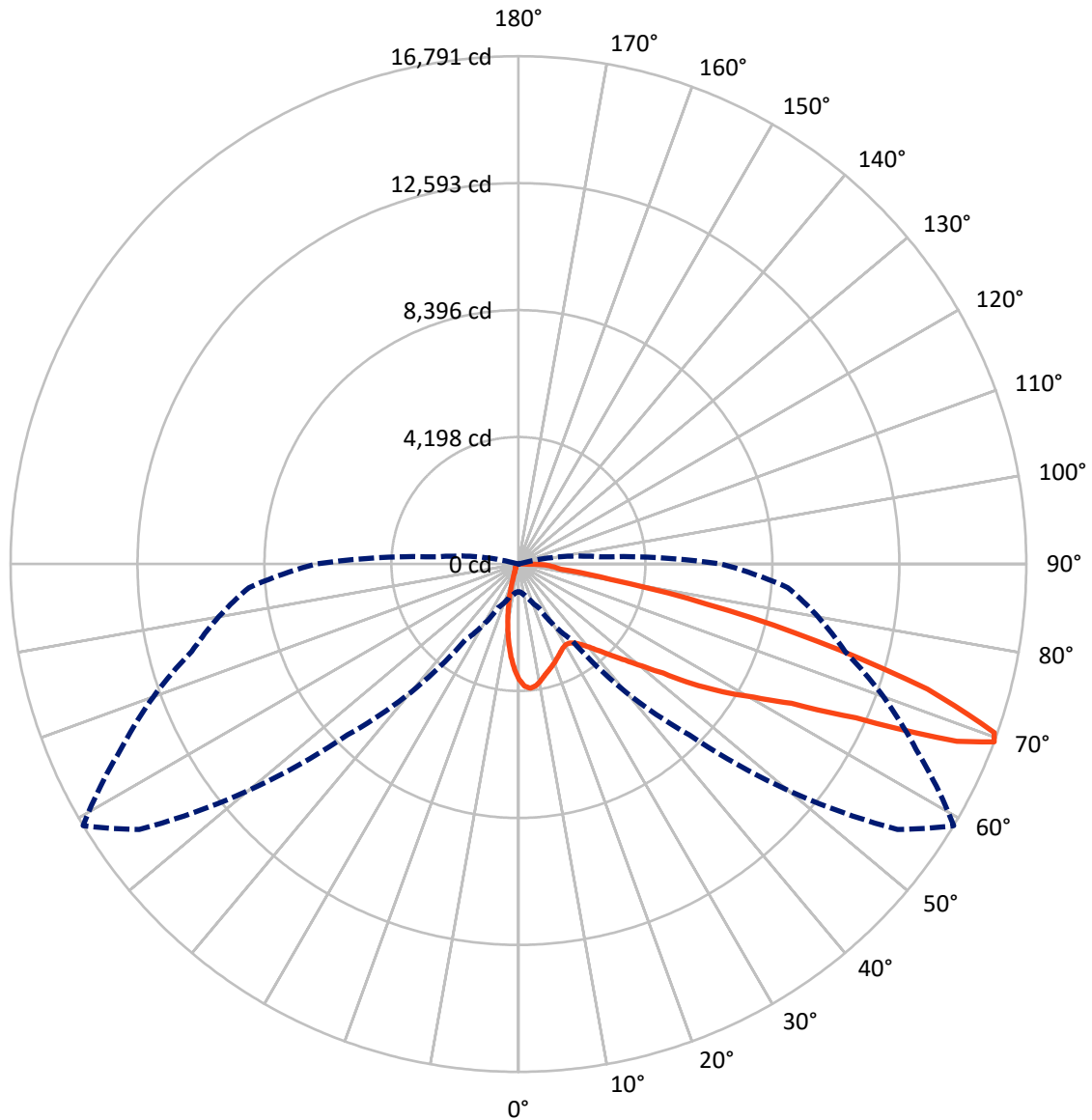


Based on 20 foot mounting height. Maximum calculated value = 9.6 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-05-LED-E1-SL3-7030-600-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-05-LED-E1-SL3-7030-600-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1198.0	0.0	1198.0
	% Fixture	8.1	0.0	8.1
Street Side	Lumens	13513.5	0.0	13513.5
	% Fixture	91.9	0.0	91.9
Total	Lumens	14711.5	0.0	14711.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	310.8	2.1
10°-20°	642.2	4.4
20°-30°	864.2	5.9
30°-40°	1254.8	8.5
40°-50°	2089.3	14.2
50°-60°	3259.3	22.2
60°-70°	4033.1	27.4
70°-80°	2043.9	13.9
80°-90°	213.9	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°	14711.5	100.0
0°-180°	14711.5	100.0



REPORT NUMBER: P299995

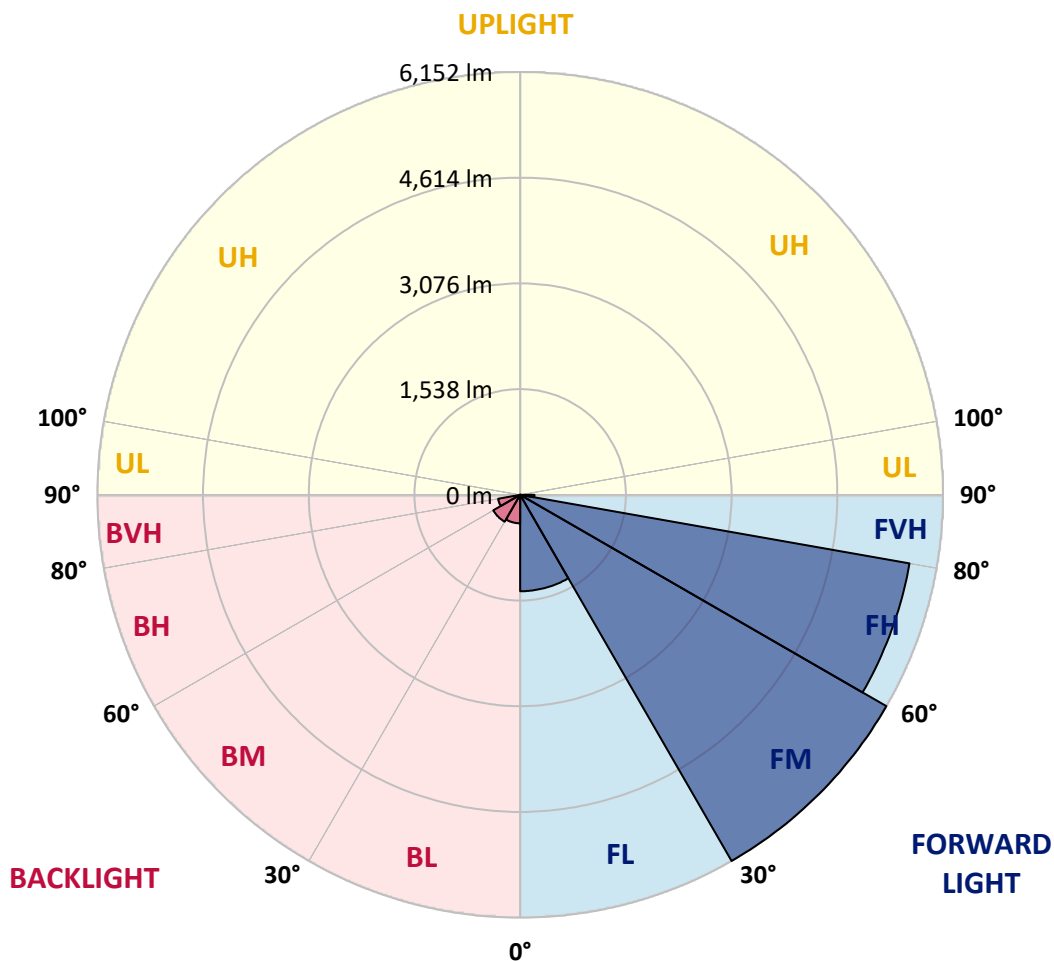
CATALOG NUMBER: GLNA-AF-05-LED-E1-SL3-7030-600-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1402.6	9.5			
FM	(30°-60°)	6151.9	41.8			
FH	(60°-80°)	5751.7	39.1			G3/7500
FVH	(80°-90°)	207.3	1.4			G2/225
BL	(0°-30°)	414.7	2.8	B1/500		
BM	(30°-60°)	451.4	3.1	B1/1000		
BH	(60°-80°)	325.4	2.2	B1/500		G1/500
BVH	(80°-90°)	6.6	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type III Short





REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-05-LED-E1-SL3-7030-600-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	3829.1	3829.1	3829.1	3829.1	3829.1	3829.1	3829.1	3829.1	3829.1	3829.1	3829.1
2.5°	4196.9	4195.3	4177.0	4168.6	4153.5	4122.1	4072.9	4047.2	4005.7	3933.2	3835.9
5°	4158.6	4178.7	4189.3	4190.3	4201.1	4189.3	4145.2	4123.8	4066.4	3949.8	3775.2
7.5°	3899.2	3906.5	3937.4	3963.9	4015.5	4064.6	4080.5	4071.2	4037.2	3912.5	3680.3
10°	3621.3	3628.6	3665.4	3700.2	3770.2	3845.8	3925.6	3942.5	3956.6	3859.1	3588.9
12.5°	3381.6	3389.1	3426.6	3472.2	3553.8	3647.0	3771.0	3798.4	3860.9	3808.5	3515.6
15°	3175.3	3178.6	3215.3	3271.8	3369.2	3488.9	3629.7	3673.7	3769.4	3772.7	3451.6
17.5°	2999.7	3008.0	3030.7	3084.6	3191.2	3339.3	3503.2	3566.4	3678.5	3742.7	3389.1
20°	2892.4	2900.8	2900.0	2930.0	3025.7	3183.6	3376.8	3452.3	3588.9	3712.0	3333.5
22.5°	2871.8	2871.8	2850.1	2845.8	2902.5	3034.7	3245.3	3337.5	3508.0	3698.7	3294.4
25°	2945.8	2942.3	2888.4	2844.3	2846.9	2925.7	3117.9	3227.7	3440.0	3707.7	3273.5
27.5°	3102.2	3098.0	3029.7	2945.8	2878.3	2877.6	3021.4	3139.5	3385.8	3751.1	3281.8
30°	3318.3	3316.8	3242.8	3137.0	3014.8	2902.5	2988.1	3095.4	3350.8	3829.1	3301.0
32.5°	3554.6	3552.1	3496.4	3385.1	3230.2	3014.8	3023.2	3113.1	3360.9	3933.2	3347.6
35°	3805.2	3800.9	3776.7	3679.5	3509.0	3221.9	3138.0	3207.8	3424.1	4088.8	3439.0
37.5°	4076.2	4080.5	4097.9	4004.7	3825.9	3512.3	3330.2	3377.5	3551.3	4300.1	3587.8
40°	4476.4	4475.7	4481.5	4359.1	4187.0	3867.4	3598.7	3613.8	3764.4	4580.5	3814.3
42.5°	5202.6	5151.9	4998.0	4748.4	4575.4	4273.4	3937.4	3921.6	4024.8	4927.3	4131.1
45°	6178.5	6070.2	5671.0	5192.7	4971.3	4731.1	4354.0	4303.4	4369.1	5344.1	4522.3
47.5°	7017.8	6905.4	6340.7	5655.2	5391.5	5165.3	4842.4	4751.0	4772.6	5810.8	5017.9
50°	7303.1	7248.2	6755.1	6057.9	5798.2	5711.8	5409.1	5297.5	5266.8	6350.6	5592.7
52.5°	7204.1	7200.1	6871.4	6319.1	6171.0	6277.5	6121.9	5992.9	5879.8	6919.8	6177.5
55°	7045.2	7066.1	6918.8	6547.8	6542.7	6794.1	7096.9	6989.6	6661.9	7537.9	6681.8
57.5°	6607.0	6695.9	6892.3	6980.5	7185.0	7442.2	7908.9	7972.1	7584.5	8011.1	7100.1
60°	5360.7	5556.2	6198.4	7042.7	8012.9	8653.4	8888.9	8942.8	8341.3	8404.5	7665.1
62.5°	3805.2	4004.7	4819.2	6247.6	8025.2	10244.7	10348.7	10136.6	9175.0	8987.9	8639.3
65°	2019.7	2173.9	2839.3	4509.7	6958.1	10614.2	12901.9	12269.7	10645.7	10134.9	9897.9
67.5°	1033.2	1079.8	1344.5	2207.1	4783.5	9427.9	15190.3	15635.4	13180.4	11273.1	9837.2
69°	914.3	941.7	1117.3	1595.6	3063.0	7985.4	15301.9	16791.0	14507.5	11178.1	8939.5
70°	885.1	909.2	1068.9	1444.2	2394.2	6696.6	14875.0	16689.5	14846.8	10817.2	8269.0
72.5°	751.3	772.0	951.8	1276.2	1945.9	3324.1	12083.3	14142.3	13322.8	9011.0	5985.4
75°	502.5	570.7	913.5	1196.4	1810.2	1888.5	7966.3	10219.8	9493.6	6077.8	3117.9
77.5°	120.6	129.7	257.9	951.8	1655.5	1662.1	4097.1	6353.1	5181.9	2166.3	737.0
80°	65.0	62.5	72.3	188.9	1541.4	1559.8	1844.4	3083.9	1850.2	359.4	242.8
82.5°	45.8	43.3	46.6	79.1	485.1	1420.8	1334.4	1395.8	766.9	138.0	109.1
85°	16.6	15.9	25.7	71.5	152.1	816.8	1370.9	1151.3	621.4	63.2	79.8
87.5°	5.8	5.0	10.1	39.0	46.6	347.8	846.0	870.2	244.6	38.3	37.5
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: P299995

CATALOG NUMBER: GLNA-AF-05-LED-E1-SL3-7030-600-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3829.1	3829.1	3829.1	3829.1	3829.1	3829.1	3829.1	3829.1	3829.1	3829.1	3829.1
2.5°	3795.1	3743.5	3648.8	3551.3	3461.4	3353.4	3299.2	3246.1	3223.6	3215.3	3176.3
5°	3685.3	3597.9	3396.7	3194.4	3008.0	2810.1	2679.6	2574.8	2513.1	2483.2	2435.8
7.5°	3544.8	3401.7	3096.2	2784.4	2494.0	2207.9	1995.8	1832.6	1720.3	1666.4	1617.2
10°	3408.3	3217.9	2783.6	2358.5	1964.1	1584.7	1291.8	1079.8	944.2	881.8	842.0
12.5°	3286.1	3039.0	2481.6	1943.4	1448.2	1004.2	706.2	537.5	453.4	424.1	410.0
15°	3177.0	2874.3	2196.3	1549.0	980.8	574.0	386.1	328.7	315.3	315.3	313.6
17.5°	3073.8	2712.9	1920.7	1178.7	615.6	351.1	293.7	286.1	286.1	289.4	289.4
20°	2974.8	2559.0	1654.5	846.0	387.6	278.6	265.5	263.7	265.5	269.5	269.5
22.5°	2889.9	2419.2	1405.9	580.6	287.9	251.1	244.6	242.0	242.8	245.3	247.1
25°	2826.7	2301.1	1171.4	393.4	247.8	228.7	221.4	217.1	213.8	213.8	215.3
27.5°	2786.9	2201.3	944.2	286.1	222.9	208.0	196.2	189.7	182.1	178.1	179.6
30°	2757.7	2106.4	731.2	233.7	199.7	184.6	169.8	158.9	148.1	143.1	144.8
32.5°	2746.9	2029.8	546.6	206.3	178.8	162.2	143.8	129.7	118.1	113.8	114.9
35°	2776.1	1969.1	400.2	186.4	162.2	141.3	120.6	104.8	95.7	93.2	93.9
37.5°	2852.6	1936.6	299.5	169.8	147.3	123.9	100.7	85.6	79.8	79.8	80.6
40°	2997.2	1935.8	240.5	158.2	134.0	107.3	83.1	72.3	69.0	70.8	71.5
42.5°	3208.5	1979.9	209.6	147.3	122.4	91.4	69.0	61.5	60.7	62.5	63.2
45°	3497.2	2060.5	192.9	138.0	109.8	76.6	58.2	53.1	53.1	55.7	56.7
47.5°	3850.8	2178.6	178.8	129.0	97.2	64.0	49.9	46.6	47.4	49.9	50.6
50°	4276.7	2327.8	164.7	118.9	88.2	53.1	43.3	40.8	41.6	44.8	45.8
52.5°	4761.8	2528.2	153.1	109.8	76.6	44.1	36.5	35.0	36.5	40.0	40.8
55°	5177.6	2707.8	139.0	102.3	61.5	36.5	30.0	30.0	31.7	35.8	36.5
57.5°	5577.8	2895.7	126.4	88.2	48.4	29.2	24.9	25.7	28.2	32.5	33.2
60°	6165.2	3214.3	111.6	74.0	36.5	23.2	20.9	21.7	24.9	29.2	30.0
62.5°	7162.6	3699.4	96.5	61.5	28.2	18.4	16.6	18.4	22.4	27.5	28.2
65°	8062.8	3896.6	79.1	51.6	21.7	14.1	14.1	16.6	21.7	26.7	27.5
67.5°	7561.0	3280.1	61.5	40.8	16.6	10.8	11.6	15.9	20.9	26.7	27.5
69°	6686.8	2682.1	52.4	32.5	14.1	10.1	10.8	15.9	20.9	25.7	26.7
70°	6005.5	2264.5	46.6	27.5	12.6	10.1	10.8	14.9	20.9	25.7	26.7
72.5°	4022.3	1222.8	37.5	19.9	11.6	9.1	9.1	14.9	19.9	24.9	25.7
75°	1728.6	337.8	30.0	14.1	10.1	8.3	8.3	14.1	19.1	24.2	25.7
77.5°	316.1	85.6	24.2	12.6	10.1	8.3	7.6	13.3	18.4	23.2	24.2
80°	125.7	42.3	19.1	10.8	9.1	7.6	6.5	12.6	17.4	22.4	23.2
82.5°	75.8	24.2	15.9	10.1	9.1	6.5	5.8	10.8	16.6	21.7	22.4
85°	61.5	16.6	12.6	10.1	8.3	6.5	5.0	10.1	14.9	20.9	21.7
87.5°	30.0	11.6	11.6	9.1	8.3	6.5	5.0	9.1	14.1	19.9	20.9
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)