

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: P299751

Luminaire Tested: **GLNA-AF-10-LED-E1-SL2-8030-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299751
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-10-LED-E1-SL2-8030-600-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(10) 80 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23830.6 lumens
Efficiency: N/A
Efficacy: 73.8 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G4

Input Watts (W): 323
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



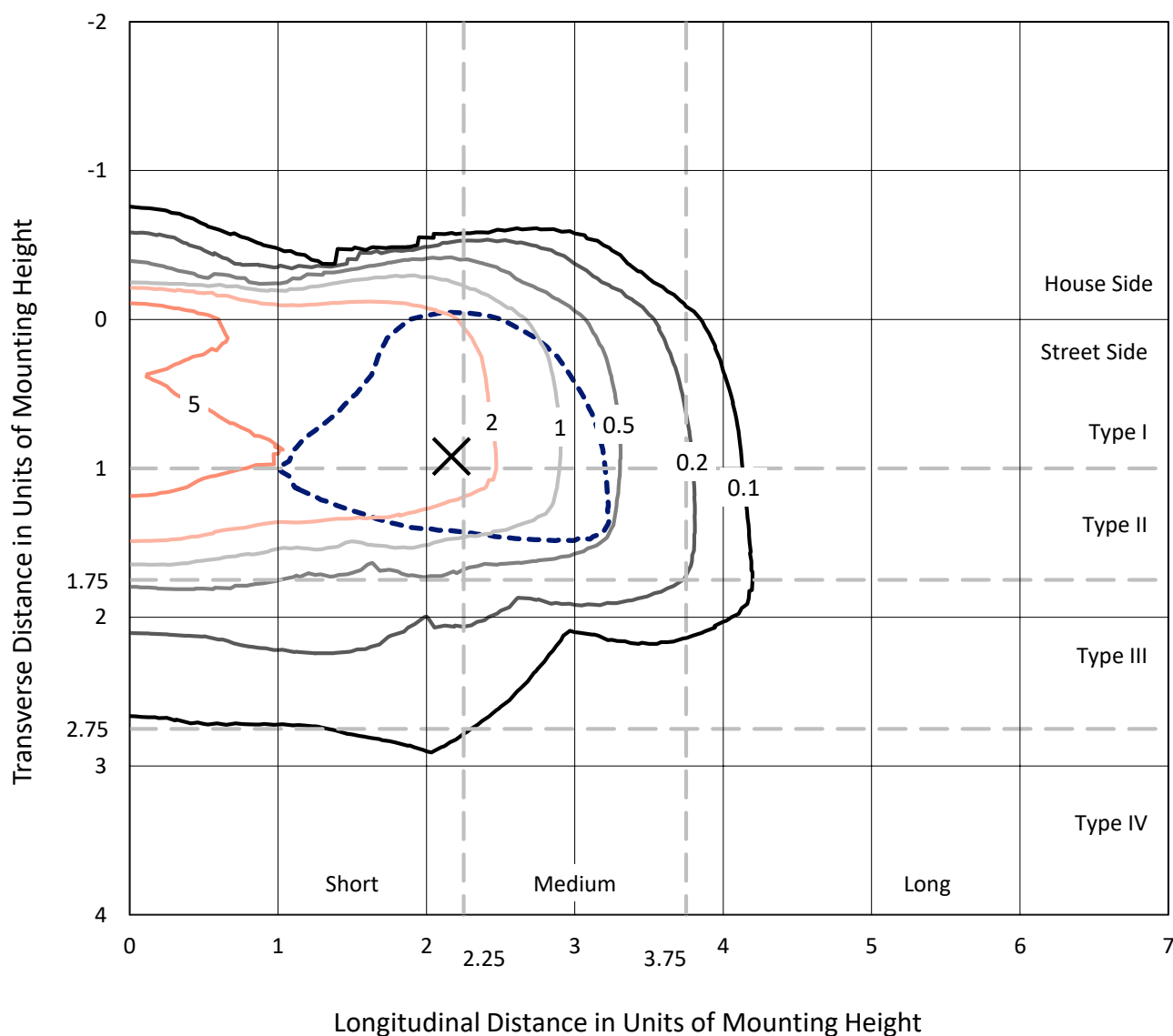
REPORT NUMBER: P299751

CATALOG NUMBER: GLNA-AF-10-LED-E1-SL2-8030-600-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

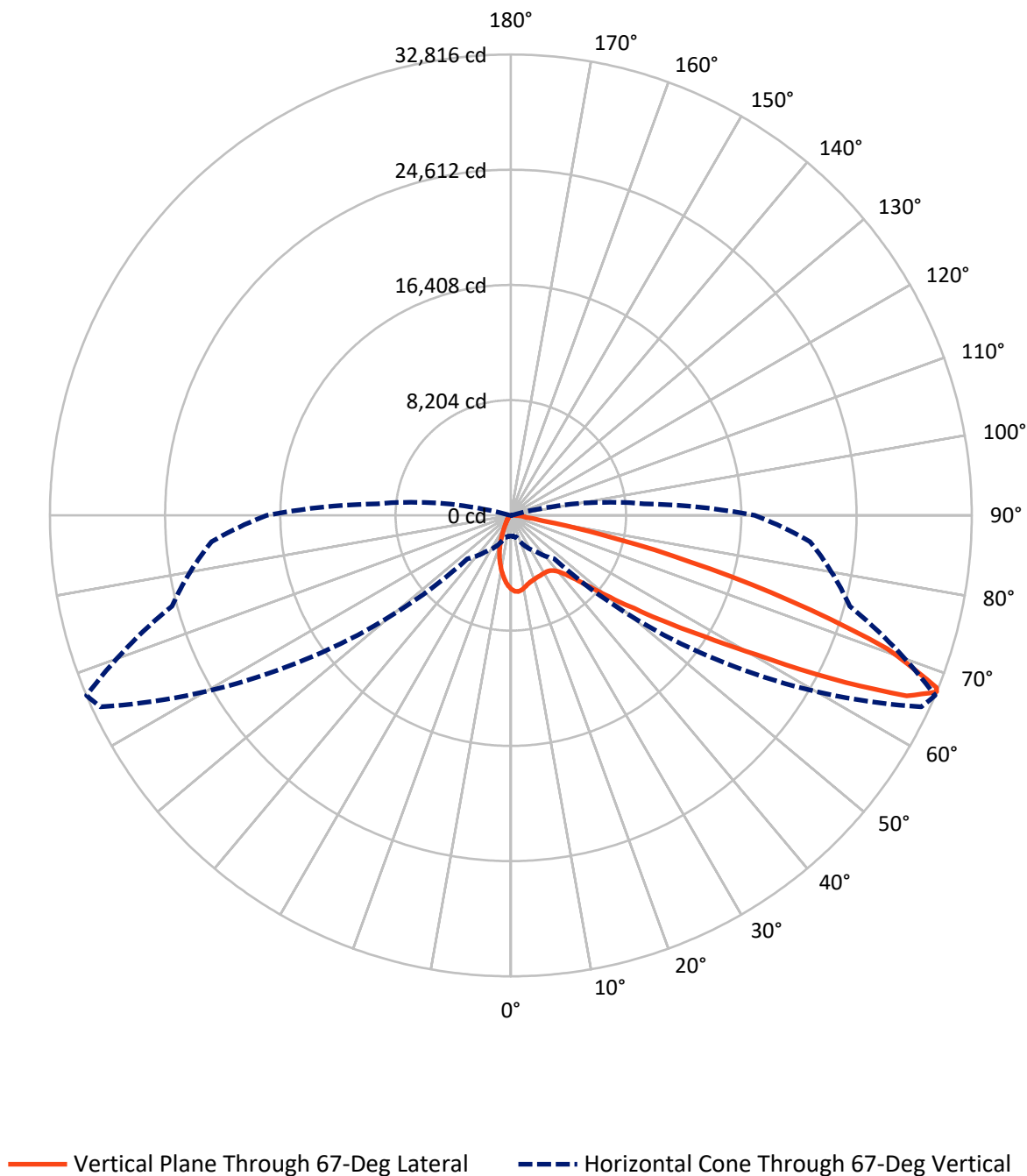


Based on 25 foot mounting height. Maximum calculated value = 8.4 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P299751

CATALOG NUMBER: GLNA-AF-10-LED-E1-SL2-8030-600-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P299751

CATALOG NUMBER: GLNA-AF-10-LED-E1-SL2-8030-600-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2474.3	0.0	2474.3
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	21356.3	0.0	21356.3
	% Fixture	89.6	0.0	89.6
Total	Lumens	23830.6	0.0	23830.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	427.6	1.8
10°-20°	910.2	3.8
20°-30°	1323.3	5.6
30°-40°	2064.4	8.7
40°-50°	3657.0	15.3
50°-60°	5786.8	24.3
60°-70°	6628.0	27.8
70°-80°	2749.3	11.5
80°-90°	284.0	1.2
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°	23830.6	100.0
0°-180°	23830.6	100.0

Coefficient of Utilization



REPORT NUMBER: P299751

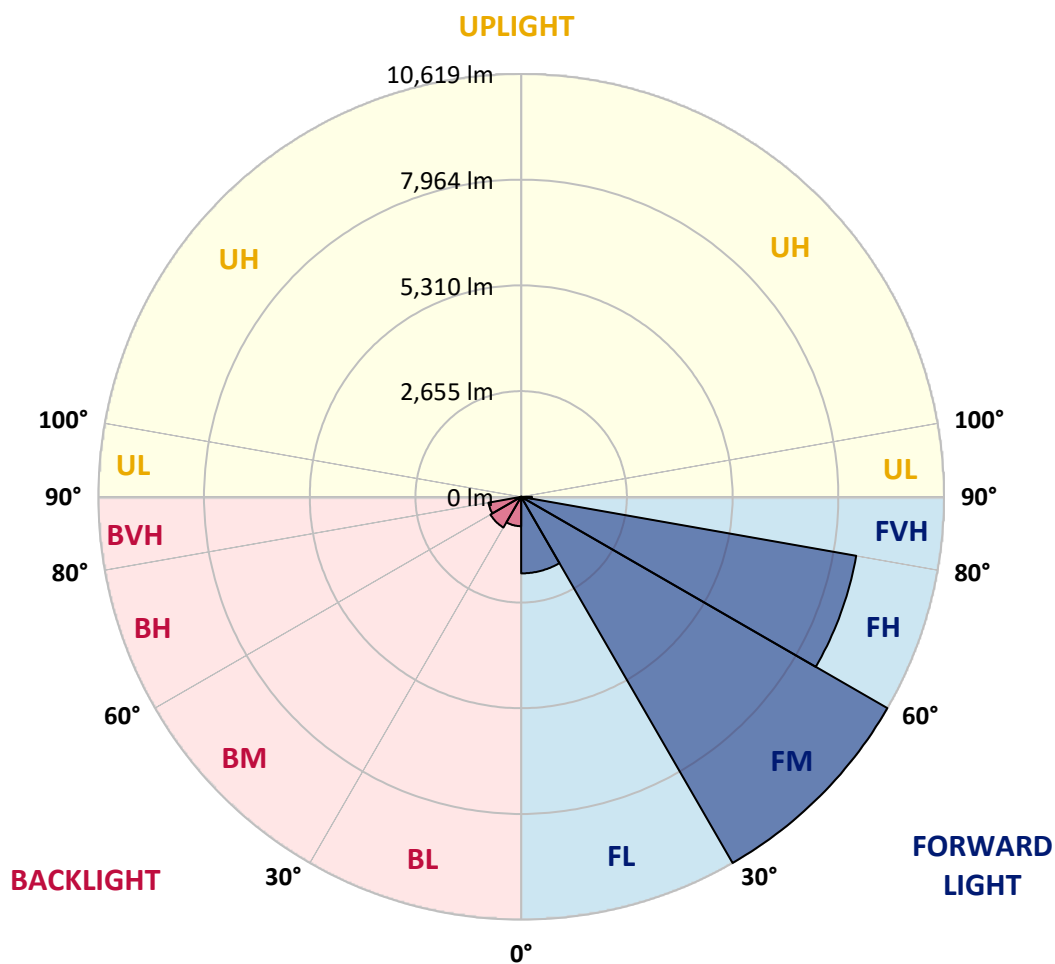
CATALOG NUMBER: GLNA-AF-10-LED-E1-SL2-8030-600-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1922.8	8.1			
FM	(30°-60°)	10619.0	44.6			
FH	(60°-80°)	8543.4	35.9			G4/12000
FVH	(80°-90°)	271.2	1.1			G3/500
BL	(0°-30°)	738.3	3.1	B2/1000		
BM	(30°-60°)	889.3	3.7	B1/1000		
BH	(60°-80°)	833.9	3.5	B2/1000		G2/1000
BVH	(80°-90°)	12.8	0.1			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 II Short



REPORT NUMBER: P299751

CATALOG NUMBER: GLNA-AF-10-LED-E1-SL2-8030-600-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	5255.5	5255.5	5255.5	5255.5	5255.5	5255.5	5255.5	5255.5	5255.5	5255.5	5255.5
2.5°	5433.5	5444.6	5443.2	5451.5	5471.0	5472.4	5452.9	5415.4	5407.0	5358.4	5273.6
5°	5010.9	5042.9	5062.3	5141.6	5230.5	5337.5	5418.2	5447.4	5443.2	5408.4	5280.6
7.5°	4528.6	4560.5	4582.8	4675.9	4794.1	4977.5	5187.4	5359.8	5375.1	5412.6	5275.0
10°	4207.5	4213.0	4243.6	4332.6	4456.3	4643.9	4894.1	5195.8	5241.6	5379.2	5261.1
12.5°	3943.4	3947.6	3987.9	4083.8	4215.8	4404.9	4667.6	5016.5	5087.4	5337.5	5258.3
15°	3755.7	3771.0	3807.2	3907.3	4047.6	4235.3	4504.9	4884.4	4969.2	5322.3	5283.3
17.5°	3693.2	3709.9	3721.0	3793.3	3921.2	4104.6	4381.2	4798.2	4894.1	5330.6	5332.0
20°	3758.5	3771.0	3746.0	3764.1	3843.3	4007.3	4277.0	4724.6	4838.5	5340.3	5394.5
22.5°	4001.8	4007.3	3939.2	3860.0	3846.1	3936.4	4195.0	4666.2	4788.5	5366.7	5468.2
25°	4418.8	4409.0	4297.8	4126.9	3965.6	3923.9	4146.3	4630.0	4763.5	5394.5	5544.7
27.5°	4921.9	4935.8	4782.9	4534.1	4226.9	4007.3	4139.4	4614.8	4752.4	5414.0	5611.4
30°	5533.5	5553.0	5377.9	5065.1	4624.5	4213.0	4203.3	4612.0	4745.4	5401.5	5616.9
32.5°	6157.6	6181.3	6043.7	5721.2	5155.5	4557.8	4347.9	4642.6	4759.3	5358.4	5585.0
35°	6810.9	6844.3	6752.6	6475.9	5875.5	5055.4	4602.2	4735.7	4824.6	5354.2	5553.0
37.5°	7713.0	7743.6	7571.3	7278.0	6747.0	5722.6	5010.9	4910.8	4978.9	5420.9	5561.3
40°	9059.9	9055.8	8611.0	8162.0	7704.7	6570.5	5585.0	5227.7	5262.5	5622.5	5664.2
42.5°	10527.8	10520.8	9863.3	9180.9	8768.0	7614.3	6339.7	5775.4	5751.8	5993.6	5931.1
45°	11659.2	11657.8	11121.3	10352.6	10048.2	8812.5	7315.5	6537.1	6501.0	6596.9	6423.1
47.5°	12141.5	12149.9	11880.2	11339.5	11467.4	10433.2	8545.6	7640.8	7586.5	7547.6	7283.5
50°	11766.2	11782.9	11805.2	11699.5	12508.5	12611.3	10195.6	9196.2	9169.7	8996.0	8583.2
52.5°	10540.3	10625.1	10886.4	11221.4	12869.9	14701.9	12782.3	11128.2	10986.5	10801.6	10347.1
55°	8474.7	8567.9	9064.1	9877.2	12332.0	16075.2	16407.4	13619.1	13382.8	12831.0	12174.9
57.5°	5608.6	5753.2	6473.2	7507.3	10769.6	16296.2	20024.1	17076.0	16253.1	14742.2	14002.7
60°	3089.9	3228.9	4010.1	4947.0	7778.4	15203.7	22456.6	21576.8	20122.8	16878.6	16222.5
62.5°	1902.9	1978.0	2554.8	3426.3	4664.8	11999.8	22959.8	27232.6	25549.3	19629.4	18903.8
65°	1515.1	1547.1	1829.2	2800.8	3344.3	7137.6	21334.9	31544.4	30982.8	22959.8	21304.3
67°	1470.6	1483.1	1616.6	2404.7	3152.5	4375.7	17873.8	32246.3	32816.2	24975.3	21379.4
67.5°	1480.3	1494.2	1620.7	2294.9	3146.9	4021.2	16681.2	31969.7	32689.7	25135.1	21047.2
70°	1427.5	1470.6	1855.6	2293.5	2992.6	3341.5	9989.8	27699.6	28448.9	23354.6	17858.5
72.5°	506.0	508.7	802.0	1855.6	3254.0	3377.7	5016.5	20306.3	20860.9	17865.5	12875.4
75°	300.2	255.8	266.9	528.2	3109.4	3280.4	2894.0	12975.5	13182.6	10237.3	6520.4
77.5°	207.1	180.7	186.3	233.5	1184.3	3234.5	2299.0	6766.5	6545.4	3590.3	1388.6
80°	118.1	104.2	111.2	204.3	430.9	3017.7	2168.4	2743.8	2339.3	608.8	383.6
82.5°	62.5	52.8	63.9	168.2	300.2	1880.7	2172.5	1326.0	1050.8	205.7	261.3
85°	22.2	18.1	30.6	115.4	200.2	576.8	2014.1	1114.8	875.7	100.1	198.8
87.5°	4.2	4.2	12.5	47.3	80.6	176.5	1191.2	661.6	443.4	59.8	136.2
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: P299751

CATALOG NUMBER: GLNA-AF-10-LED-E1-SL2-8030-600-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5255.5	5255.5	5255.5	5255.5	5255.5	5255.5	5255.5	5255.5	5255.5	5255.5	5255.5
2.5°	5238.9	5179.1	5098.5	4999.8	4883.0	4780.2	4703.7	4624.5	4607.8	4580.0	4575.8
5°	5204.1	5101.3	4901.1	4671.7	4427.1	4206.1	4026.8	3866.9	3796.1	3734.9	3727.9
7.5°	5152.7	4998.4	4657.8	4288.1	3905.9	3558.4	3263.7	3055.2	2863.4	2771.6	2757.7
10°	5092.9	4871.9	4384.0	3871.1	3342.9	2852.3	2414.4	2047.5	1825.1	1693.0	1676.3
12.5°	5037.3	4748.2	4104.6	3438.8	2736.9	2080.8	1517.9	1167.6	934.1	839.6	828.4
15°	5010.9	4648.1	3843.3	2996.8	2103.0	1324.7	829.8	642.2	565.7	543.5	542.1
17.5°	5008.1	4563.3	3587.6	2539.5	1473.4	770.1	540.7	493.4	478.2	472.6	472.6
20°	5006.7	4482.7	3331.8	2065.5	935.5	512.9	450.4	439.2	428.1	421.2	421.2
22.5°	5022.0	4410.4	3064.9	1581.8	589.4	415.6	396.1	385.0	371.1	361.4	360.0
25°	5037.3	4354.8	2792.5	1125.9	426.7	361.4	341.9	326.6	307.2	294.7	293.3
27.5°	5040.1	4285.3	2500.6	753.4	357.2	315.5	290.5	266.9	244.6	232.1	230.7
30°	4998.4	4168.6	2176.7	508.7	315.5	273.8	240.5	215.4	194.6	184.9	184.9
32.5°	4916.4	4024.0	1820.9	383.6	280.8	234.9	198.8	175.1	161.2	157.1	155.7
35°	4842.7	3868.3	1455.3	325.3	251.6	198.8	162.6	147.3	139.0	137.6	136.2
37.5°	4799.6	3743.2	1112.0	294.7	223.8	166.8	137.6	126.5	122.3	119.5	120.9
40°	4833.0	3639.0	821.5	269.7	196.0	139.0	116.8	111.2	107.0	105.6	105.6
42.5°	4978.9	3620.9	610.2	247.4	169.6	115.4	101.5	97.3	94.5	93.1	94.5
45°	5362.6	3732.1	474.0	226.6	143.2	97.3	86.2	84.8	83.4	83.4	83.4
47.5°	5939.4	3961.5	394.8	202.9	119.5	83.4	75.1	73.7	72.3	73.7	73.7
50°	6916.6	4381.2	353.1	179.3	98.7	70.9	63.9	63.9	63.9	63.9	65.3
52.5°	8402.5	5206.9	325.3	155.7	80.6	59.8	54.2	54.2	55.6	55.6	57.0
55°	10057.9	6302.2	300.2	132.0	68.1	50.0	44.5	45.9	47.3	48.6	48.6
57.5°	11853.8	7515.7	279.4	108.4	58.4	40.3	37.5	38.9	40.3	43.1	43.1
60°	14020.8	8829.2	248.8	84.8	48.6	32.0	29.2	32.0	36.1	38.9	40.3
62.5°	16400.5	10099.6	209.9	66.7	40.3	25.0	23.6	29.2	34.7	37.5	38.9
65°	18026.7	10498.6	161.2	54.2	30.6	18.1	19.5	26.4	33.4	37.5	37.5
67°	17367.9	9518.6	132.0	45.9	25.0	13.9	18.1	26.4	33.4	36.1	37.5
67.5°	16910.6	9135.0	126.5	44.5	23.6	13.9	18.1	26.4	33.4	37.5	37.5
70°	13759.5	6862.4	105.6	33.4	19.5	12.5	15.3	25.0	32.0	36.1	36.1
72.5°	9560.3	4231.1	94.5	23.6	16.7	11.1	13.9	23.6	30.6	34.7	36.1
75°	4545.3	1531.8	80.6	18.1	15.3	9.7	12.5	23.6	30.6	34.7	34.7
77.5°	927.1	355.8	65.3	15.3	12.5	9.7	11.1	22.2	29.2	33.4	33.4
80°	304.4	137.6	48.6	13.9	12.5	9.7	11.1	20.8	29.2	32.0	33.4
82.5°	219.6	69.5	32.0	13.9	12.5	9.7	9.7	20.8	27.8	32.0	32.0
85°	168.2	48.6	20.8	13.9	12.5	9.7	9.7	19.5	26.4	30.6	30.6
87.5°	111.2	19.5	16.7	13.9	12.5	9.7	9.7	19.5	25.0	29.2	30.6
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)