

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: STREETWORKS

Report Number: P300678

Luminaire Tested: **GAA-AF-04-LED-U-AFL-7027-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300678
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24297)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAA-AF-04-LED-U-AFL-7027-800-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline WITH HOUSESIDE SHIELD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12534.2 lumens
Efficiency: N/A
Efficacy: 73.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 171
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: 28.75 FT

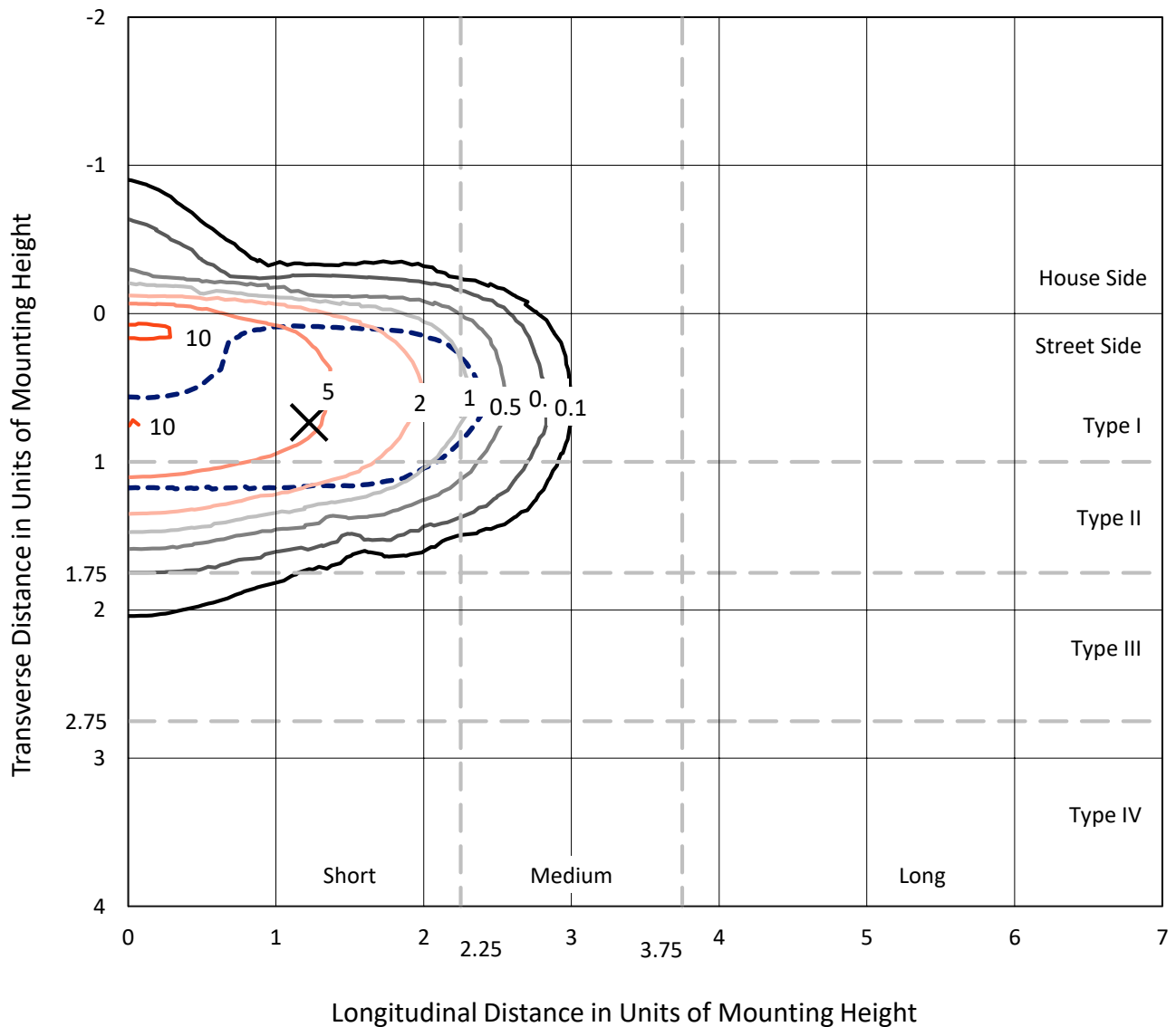


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

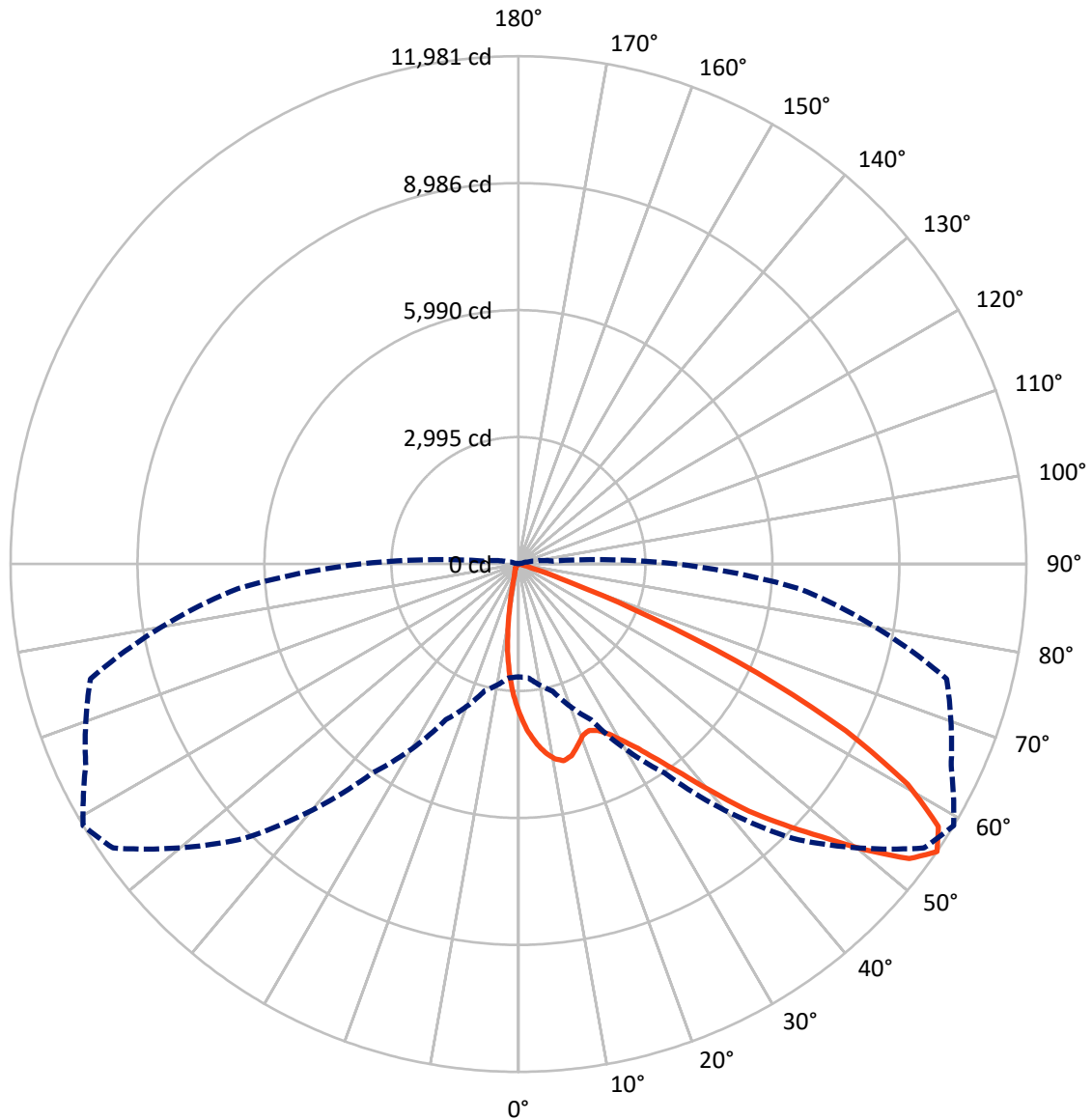


Based on 20 foot mounting height. Maximum calculated value = 11 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical



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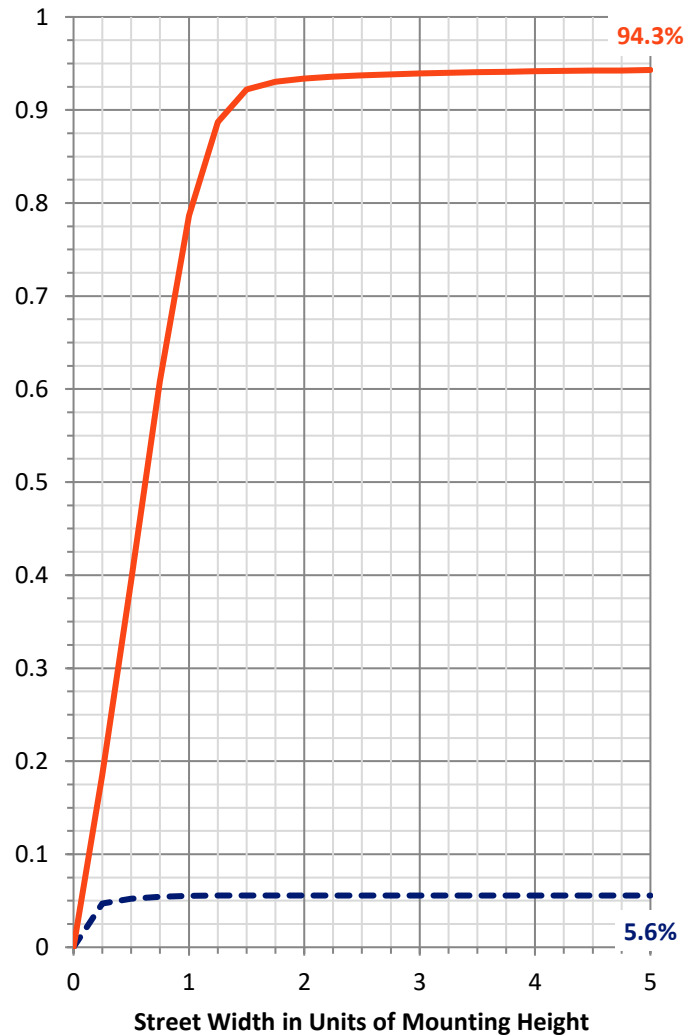
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	700.1	0.0	700.1
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	11834.1	0.0	11834.1
	% Fixture	94.4	0.0	94.4
Total	Lumens	12534.2	0.0	12534.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	295.5	2.4
10°-20°	707.6	5.6
20°-30°	1204.0	9.6
30°-40°	2070.7	16.5
40°-50°	3196.9	25.5
50°-60°	3213.9	25.6
60°-70°	1648.1	13.1
70°-80°	178.6	1.4
80°-90°	18.7	0.1
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°	12534.2	100.0
0°-180°	12534.2	100.0

Coefficient of Utilization



--- HS — SS

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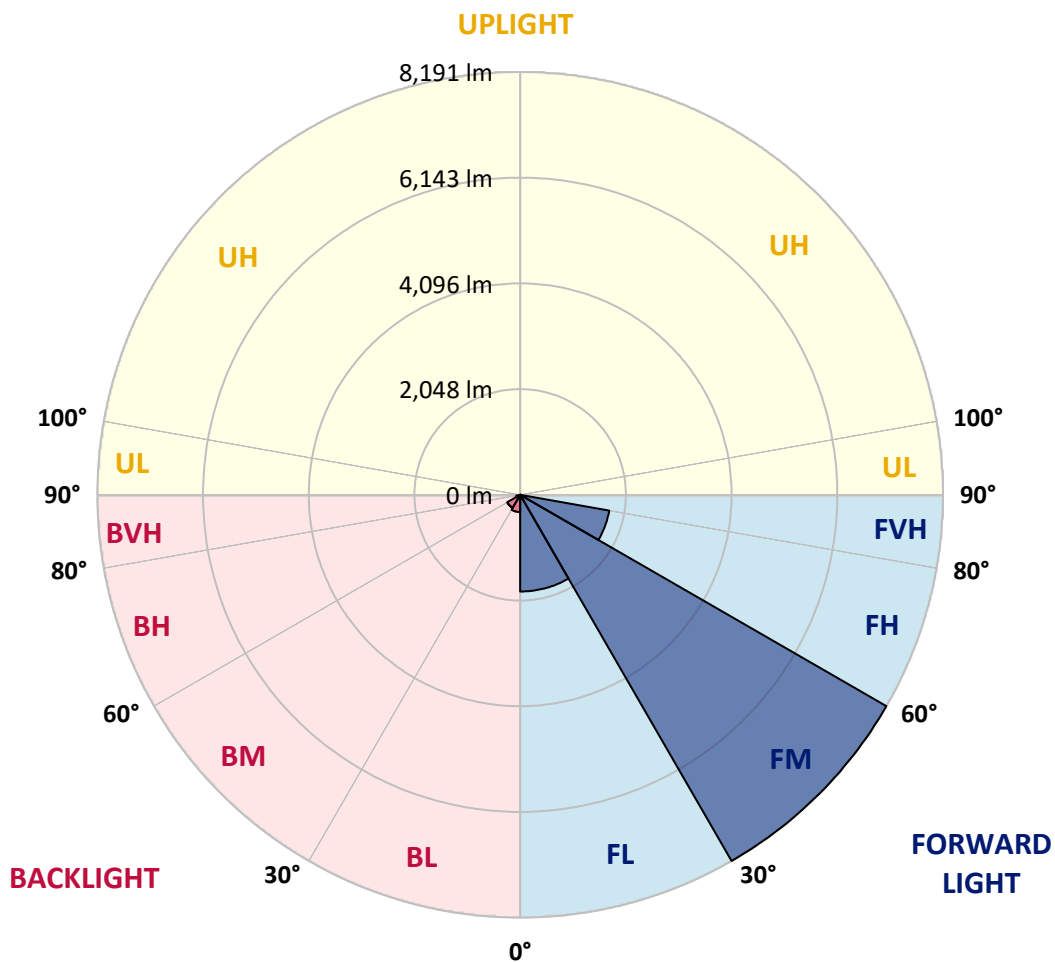
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1873.0	14.9			
FM	(30°-60°)	8191.0	65.3			
FH	(60°-80°)	1751.7	14.0			G1/1800
FVH	(80°-90°)	18.3	0.1			G1/100
BL	(0°-30°)	334.2	2.7	B1/500		
BM	(30°-60°)	290.6	2.3	B1/1000		
BH	(60°-80°)	75.0	0.6	B0/110		G0/110
BVH	(80°-90°)	0.4	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-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	3528.3	3528.3	3528.3	3528.3	3528.3	3528.3	3528.3	3528.3	3528.3	3528.3	3528.3
2.5°	4174.8	4130.4	4117.1	4108.2	4067.6	4016.5	3947.0	3914.4	3847.9	3740.6	3608.9
5°	4557.2	4549.1	4519.5	4503.2	4459.6	4387.1	4276.1	4222.9	4117.1	3936.6	3700.7
7.5°	4390.1	4441.1	4481.8	4549.8	4635.6	4632.7	4539.5	4484.0	4365.6	4127.5	3802.7
10°	3744.3	3785.7	3852.3	4006.9	4322.0	4600.1	4709.6	4669.7	4575.0	4302.8	3901.1
12.5°	3617.8	3613.4	3625.2	3670.3	3835.3	4231.8	4680.8	4761.4	4742.1	4463.3	3994.3
15°	3685.1	3680.0	3678.5	3694.0	3734.0	3901.1	4464.0	4695.5	4844.2	4612.0	4073.5
17.5°	3873.8	3851.6	3839.7	3827.2	3815.3	3856.7	4203.7	4511.4	4859.8	4742.1	4139.3
20°	4197.0	4160.0	4116.4	4045.4	3978.8	3958.1	4094.2	4322.0	4804.3	4841.3	4182.2
22.5°	4603.1	4555.7	4480.3	4350.9	4215.5	4137.1	4148.2	4262.1	4721.4	4949.3	4202.2
25°	5059.5	4998.8	4898.2	4718.5	4519.5	4380.4	4307.9	4347.9	4683.7	5075.7	4225.1
27.5°	5548.4	5481.1	5349.4	5104.6	4879.0	4691.1	4543.2	4538.0	4748.1	5241.4	4262.1
30°	6032.9	6022.5	5850.9	5592.0	5293.2	5064.7	4851.6	4824.3	4927.8	5470.7	4335.3
32.5°	6679.4	6601.7	6391.7	6125.4	5780.7	5506.2	5254.0	5190.4	5203.7	5737.8	4448.5
35°	7494.5	7409.5	7113.6	6746.0	6360.6	6036.6	5757.7	5671.2	5638.7	6174.9	4639.3
37.5°	8021.2	8019.7	7834.0	7459.8	7046.3	6689.0	6385.7	6284.4	6218.6	6703.1	4935.2
40°	8035.2	8070.0	8094.4	8090.7	7796.3	7467.2	7197.9	7072.9	6919.8	7408.7	5317.6
42.5°	7604.0	7693.5	7908.8	8274.2	8448.7	8317.8	8090.7	7967.9	7740.1	8163.9	5783.6
45°	7021.1	7083.3	7459.8	8132.9	8802.3	9161.0	8988.0	8768.3	8468.0	8951.7	6201.6
47.5°	6760.0	6771.1	7014.5	7753.4	8828.9	9851.9	9957.0	9599.7	9129.2	9586.4	6528.5
50°	5979.6	5999.6	6335.4	7095.8	8516.8	10178.1	10930.4	10591.6	9850.4	10075.3	6647.6
52.5°	4506.9	4535.0	4961.1	6015.2	7658.7	10039.1	11627.2	11545.1	10640.4	10314.2	6654.2
55°	2659.2	2696.2	3103.0	4049.1	6024.0	9154.4	11679.0	11980.7	11264.0	10455.5	6643.9
57.5°	1241.9	1267.8	1500.8	2085.9	3746.5	7234.9	10899.3	11681.9	11607.9	10530.2	6717.1
60°	659.8	667.2	723.4	903.2	1693.1	4587.6	9377.8	10548.7	11294.3	10633.8	6806.6
62.5°	504.5	506.7	503.7	525.2	711.6	2036.4	7088.4	8672.1	10031.7	10556.1	6707.5
65°	437.2	440.9	420.1	415.0	456.4	726.4	4211.1	6181.6	7882.9	9508.0	6032.2
67.5°	392.0	393.5	368.4	346.9	354.3	392.8	1661.3	3384.1	5217.8	6969.4	4372.3
70°	361.0	359.5	332.1	298.1	288.5	268.5	528.1	1240.5	2493.5	3534.2	2033.4
72.5°	319.5	320.3	307.0	262.6	239.7	187.9	244.8	361.7	744.1	963.1	476.4
75°	283.3	279.6	263.3	235.2	197.5	123.5	121.3	161.3	229.3	227.8	102.8
77.5°	204.9	201.2	206.4	193.1	151.6	79.9	60.7	77.7	93.2	90.2	28.8
80°	150.2	147.9	133.1	160.5	133.9	54.7	37.7	41.4	48.1	40.7	8.9
82.5°	102.8	102.1	93.9	88.8	76.2	33.3	23.7	25.9	31.1	22.9	4.4
85°	16.3	18.5	68.1	54.0	45.1	14.8	16.3	17.8	20.7	12.6	1.5
87.5°	0.0	0.0	31.8	28.1	8.9	5.9	9.6	10.4	10.4	6.7	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3528.3	3528.3	3528.3	3528.3	3528.3	3528.3	3528.3	3528.3	3528.3	3528.3	3528.3
2.5°	3541.6	3467.7	3330.8	3189.5	3058.6	2902.5	2795.3	2714.7	2621.5	2596.3	2651.0
5°	3566.0	3426.2	3131.8	2811.6	2510.5	2176.9	1921.7	1719.8	1537.1	1474.9	1531.2
7.5°	3604.5	3396.7	2916.6	2389.2	1865.5	1344.8	988.2	753.7	604.3	559.9	583.6
10°	3643.0	3353.8	2667.3	1889.2	1173.1	654.6	426.1	340.3	308.5	301.8	305.5
12.5°	3674.8	3296.1	2363.3	1343.3	627.3	350.6	278.9	264.8	260.4	260.4	261.8
15°	3694.0	3208.8	2003.1	854.3	361.0	264.8	243.4	238.9	238.9	239.7	241.1
17.5°	3691.8	3097.8	1608.8	517.0	270.0	234.5	221.9	218.2	217.5	218.9	219.7
20°	3664.4	2952.8	1213.1	341.0	235.2	213.8	201.2	194.5	193.8	195.3	196.8
22.5°	3612.6	2773.8	867.7	262.6	212.3	193.8	178.3	172.3	172.3	173.8	175.3
25°	3549.8	2554.9	593.2	222.6	191.6	172.3	157.6	152.4	153.9	157.6	158.3
27.5°	3471.4	2308.6	403.1	190.8	166.4	150.9	139.8	136.1	139.8	145.0	146.5
30°	3404.0	2051.9	287.7	165.0	141.3	130.2	123.5	123.5	128.7	138.3	140.5
32.5°	3352.3	1803.4	221.9	145.7	122.8	113.2	109.5	113.2	121.3	130.9	133.1
35°	3345.6	1598.5	187.9	130.2	109.5	99.9	98.4	105.0	113.2	120.6	122.0
37.5°	3396.7	1409.1	169.4	117.6	97.6	88.8	87.3	95.4	103.6	112.4	114.7
40°	3493.6	1260.4	156.1	105.8	88.0	78.4	75.4	81.4	92.5	104.3	107.3
42.5°	3619.3	1137.6	141.3	93.9	78.4	65.1	61.4	68.1	79.9	92.5	96.2
45°	3739.1	1031.9	125.0	80.6	65.8	50.3	48.8	57.7	63.6	76.2	79.1
47.5°	3805.0	938.7	111.0	65.8	51.0	40.7	40.7	42.9	48.8	63.6	66.6
50°	3782.8	864.0	96.2	48.8	35.5	31.1	31.1	30.3	39.2	51.0	53.3
52.5°	3738.4	821.1	82.8	37.7	24.4	22.2	20.0	22.2	27.4	32.5	33.3
55°	3731.7	813.7	69.5	30.3	17.0	14.8	11.1	11.1	11.1	10.4	8.9
57.5°	3783.5	825.5	58.4	24.4	12.6	9.6	5.9	0.0	0.0	0.0	0.0
60°	3836.8	838.1	50.3	17.0	8.9	5.2	0.7	0.0	0.0	0.0	0.0
62.5°	3748.0	810.0	42.2	10.4	6.7	2.2	0.0	0.0	0.0	0.0	0.0
65°	3292.4	689.4	33.3	7.4	4.4	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	2341.9	461.6	22.2	4.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0
70°	1068.9	193.1	14.1	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	228.6	59.9	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	46.6	43.6	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	14.8	68.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	8.9	49.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	1.5	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	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)