

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: P190912

Luminaire Tested: **GAN-AF-04-LED-U-AFL-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190912
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: GAN-AF-04-LED-U-AFL-600-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13248.2 lumens
Efficiency: N/A
Efficacy: 102.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G2

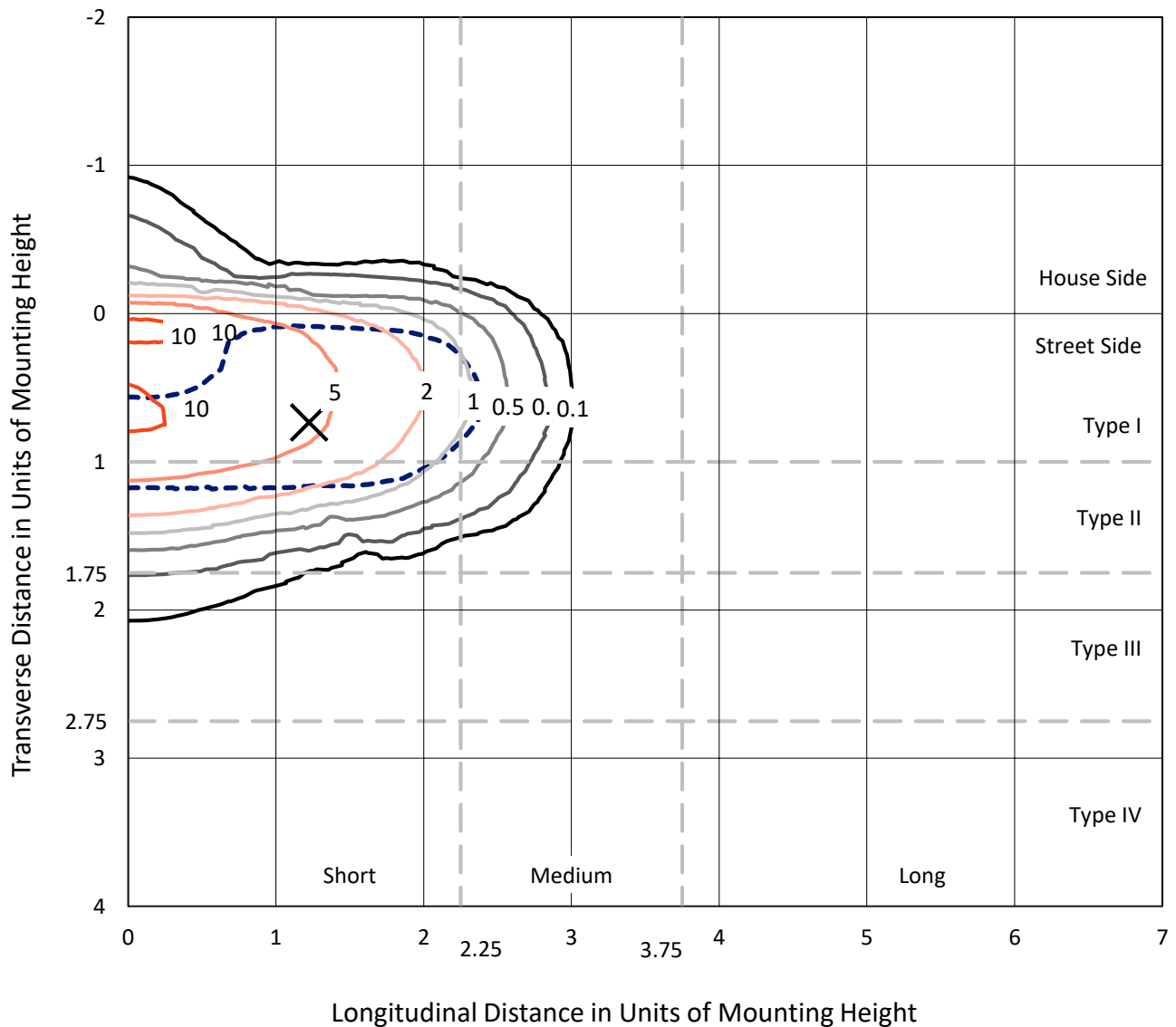
Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

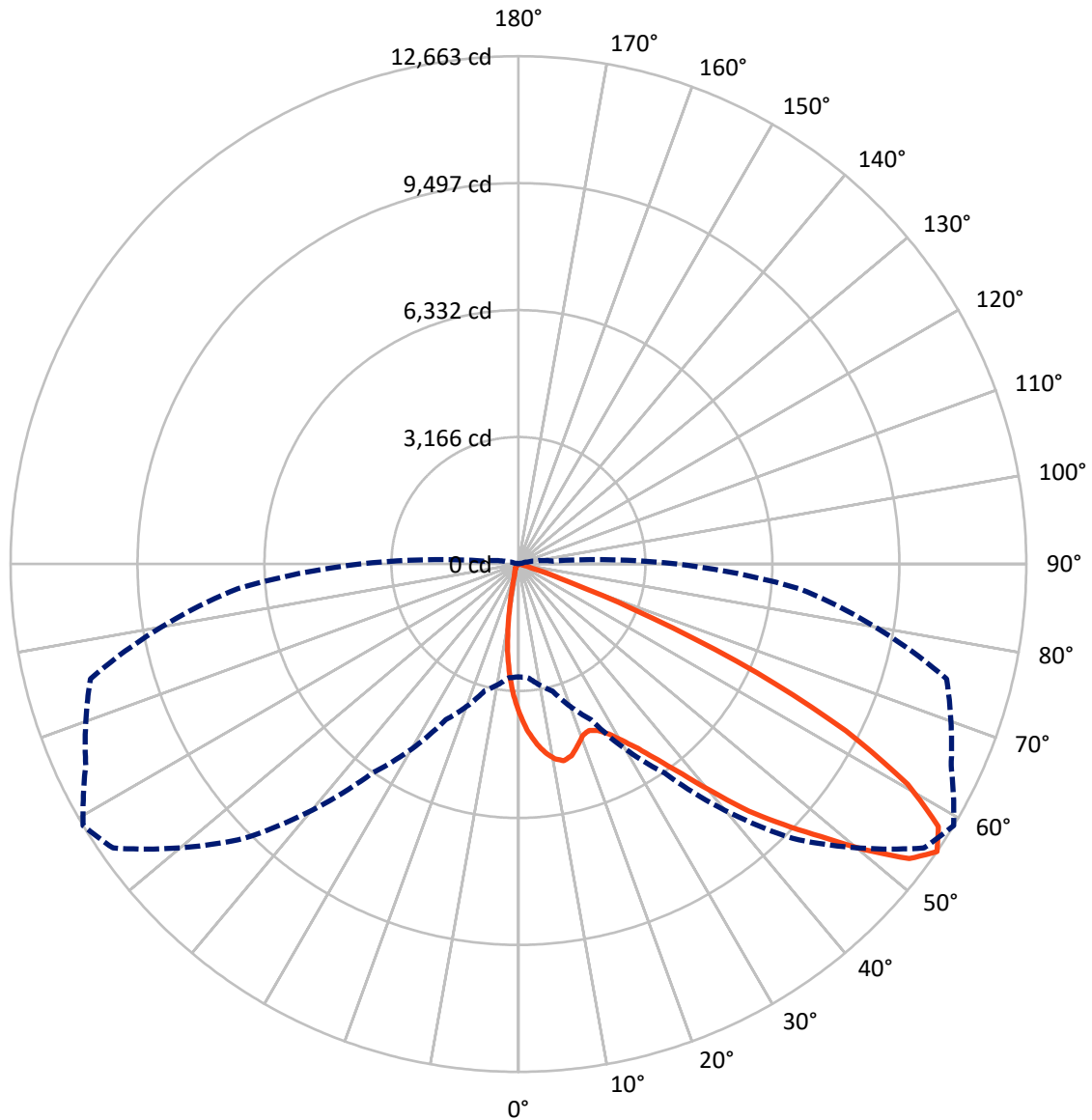
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 11.6 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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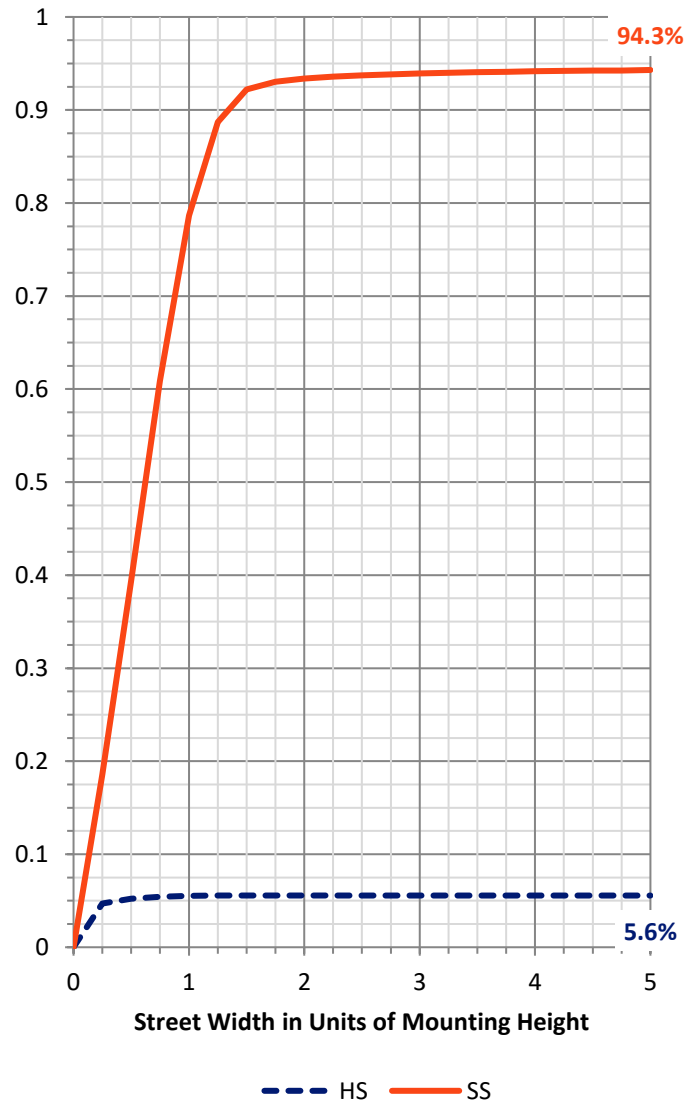
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	740.0	0.0	740.0
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	12508.2	0.0	12508.2
	% Fixture	94.4	0.0	94.4
Total	Lumens	13248.2	0.0	13248.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	312.4	2.4
10°-20°	747.9	5.6
20°-30°	1272.6	9.6
30°-40°	2188.7	16.5
40°-50°	3379.1	25.5
50°-60°	3397.0	25.6
60°-70°	1742.0	13.1
70°-80°	188.8	1.4
80°-90°	19.7	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°	13248.2	100.0
0°-180°	13248.2	100.0



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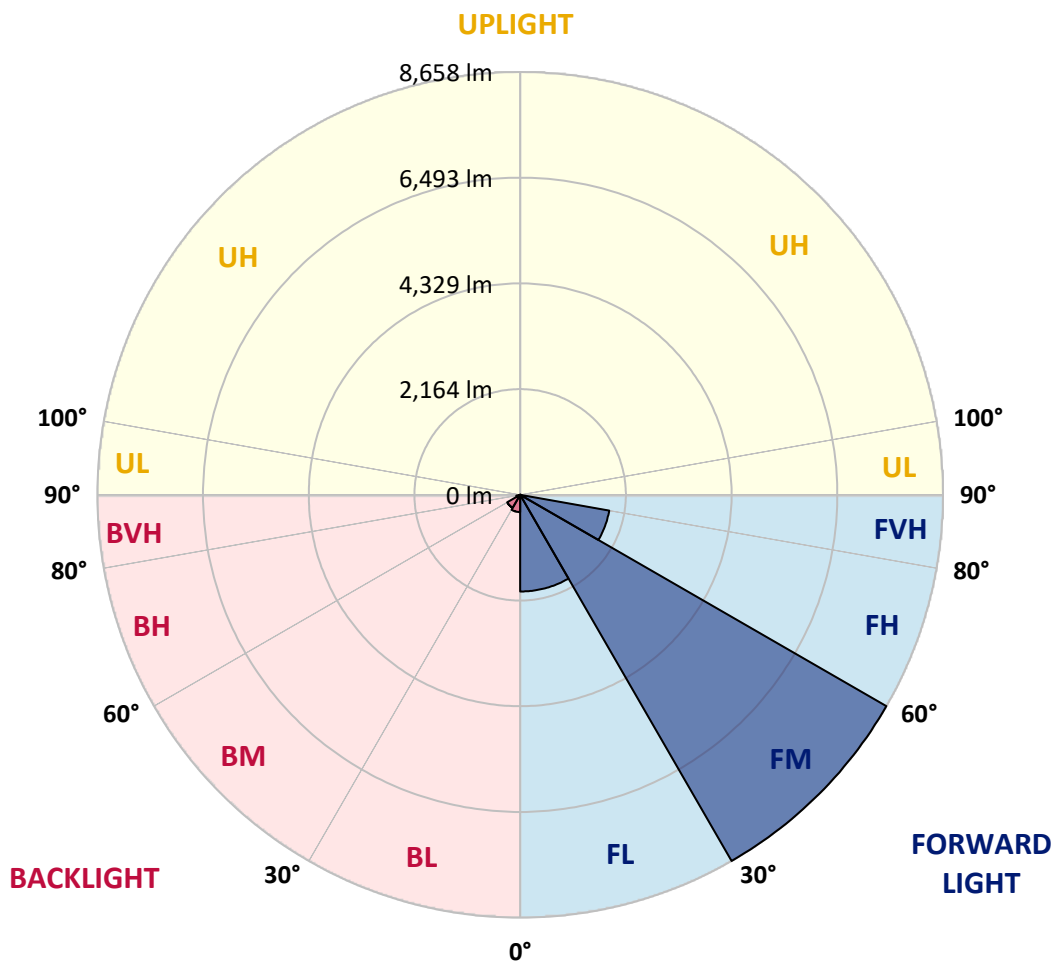
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1979.7	14.9			
FM	(30°-60°)	8657.7	65.3			
FH	(60°-80°)	1851.5	14.0			G2/5000
FVH	(80°-90°)	19.3	0.1			G1/100
BL	(0°-30°)	353.2	2.7	B1/500		
BM	(30°-60°)	307.1	2.3	B1/1000		
BH	(60°-80°)	79.3	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-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	3729.4	3729.4	3729.4	3729.4	3729.4	3729.4	3729.4	3729.4	3729.4	3729.4	3729.4
2.5°	4412.6	4365.7	4351.6	4342.3	4299.3	4245.3	4171.8	4137.4	4067.0	3953.7	3814.6
5°	4816.9	4808.3	4777.0	4759.8	4713.7	4637.0	4519.8	4463.4	4351.6	4160.9	3911.5
7.5°	4640.2	4694.1	4737.1	4809.0	4899.7	4896.6	4798.0	4739.4	4614.3	4362.6	4019.4
10°	3957.6	4001.4	4071.8	4235.2	4568.2	4862.2	4977.9	4935.7	4835.6	4547.9	4123.4
12.5°	3823.9	3819.3	3831.8	3879.4	4053.7	4472.9	4947.4	5032.6	5012.4	4717.5	4221.9
15°	3895.1	3889.6	3888.0	3904.5	3946.6	4123.4	4718.4	4963.1	5120.2	4874.7	4305.5
17.5°	4094.5	4071.0	4058.5	4045.2	4032.7	4076.5	4443.2	4768.4	5136.6	5012.4	4375.2
20°	4436.1	4397.1	4350.9	4275.8	4205.5	4183.6	4327.4	4568.2	5078.0	5117.1	4420.5
22.5°	4865.4	4815.3	4735.5	4598.7	4455.7	4372.8	4384.5	4504.9	4990.5	5231.3	4441.6
25°	5347.7	5283.6	5177.3	4987.3	4777.0	4630.0	4553.4	4595.6	4950.6	5365.0	4465.8
27.5°	5864.5	5793.4	5654.2	5395.5	5157.0	4958.3	4802.0	4796.5	5018.6	5540.1	4504.9
30°	6376.6	6365.6	6184.2	5910.6	5594.8	5353.2	5128.1	5099.1	5208.6	5782.4	4582.3
32.5°	7059.9	6977.9	6755.8	6474.4	6110.0	5820.0	5553.3	5486.1	5500.2	6064.7	4701.9
35°	7921.5	7831.6	7518.9	7130.3	6722.9	6380.6	6085.7	5994.3	5959.9	6526.7	4903.6
37.5°	8478.2	8476.6	8280.4	7884.8	7447.7	7070.1	6749.5	6642.4	6572.9	7085.0	5216.3
40°	8493.0	8529.8	8555.6	8551.7	8240.5	7892.6	7608.0	7475.8	7314.0	7830.8	5620.6
42.5°	8037.2	8131.8	8359.3	8745.5	8930.1	8791.6	8551.7	8421.9	8181.0	8629.1	6113.2
45°	7421.1	7486.8	7884.8	8596.3	9303.7	9682.9	9500.0	9267.8	8950.4	9461.7	6554.9
47.5°	7145.1	7156.9	7414.1	8195.2	9332.0	10413.2	10524.2	10146.5	9649.4	10132.5	6900.4
50°	6320.3	6341.5	6696.3	7500.1	9002.0	10758.0	11553.1	11195.1	10411.6	10649.3	7026.3
52.5°	4763.7	4793.4	5243.7	6357.8	8095.1	10611.0	12289.6	12202.8	11246.6	10901.8	7033.3
55°	2810.7	2849.7	3279.8	4279.7	6367.3	9675.9	12344.4	12663.3	11905.7	11051.1	7022.4
57.5°	1312.7	1340.1	1586.3	2204.8	3959.9	7647.1	11520.3	12347.4	12269.3	11130.1	7099.8
60°	697.3	705.2	764.7	954.6	1789.7	4848.9	9912.1	11149.7	11937.7	11239.6	7194.4
62.5°	533.2	535.5	532.4	555.1	752.1	2152.4	7492.3	9166.2	10603.2	11157.5	7089.7
65°	462.1	466.0	444.1	438.6	482.4	767.7	4451.0	6533.8	8331.9	10049.7	6375.8
67.5°	414.4	415.9	389.3	366.7	374.5	415.1	1756.0	3576.8	5515.0	7366.4	4621.4
70°	381.6	379.9	351.1	315.1	304.9	283.8	558.2	1311.1	2635.5	3735.6	2149.2
72.5°	337.8	338.5	324.5	277.5	253.3	198.6	258.8	382.3	786.5	1017.9	503.5
75°	299.4	295.5	278.3	248.6	208.8	130.5	128.2	170.4	242.3	240.8	108.6
77.5°	216.6	212.7	218.1	204.1	160.3	84.4	64.1	82.1	98.5	95.3	30.5
80°	158.8	156.4	140.8	169.7	141.5	57.9	39.9	43.8	50.8	43.0	9.4
82.5°	108.6	107.9	99.3	93.8	80.5	35.2	25.1	27.4	32.8	24.2	4.7
85°	17.2	19.5	71.9	57.1	47.7	15.7	17.2	18.7	21.9	13.3	1.5
87.5°	0.0	0.0	33.7	29.7	9.4	6.2	10.1	10.9	10.9	7.1	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°	3729.4	3729.4	3729.4	3729.4	3729.4	3729.4	3729.4	3729.4	3729.4	3729.4	3729.4
2.5°	3743.4	3665.2	3520.6	3371.2	3232.8	3067.9	2954.5	2869.3	2770.8	2744.3	2802.1
5°	3769.2	3621.5	3310.3	2971.8	2653.5	2300.9	2031.2	1817.8	1624.7	1559.0	1618.4
7.5°	3809.9	3590.1	3082.8	2525.4	1971.7	1421.4	1044.5	796.7	638.7	591.9	616.8
10°	3850.5	3544.8	2819.3	1996.8	1240.0	691.9	450.3	359.7	326.0	319.0	322.9
12.5°	3884.1	3483.9	2497.9	1419.8	663.0	370.6	294.7	279.9	275.2	275.2	276.8
15°	3904.5	3391.6	2117.2	903.1	381.6	279.9	257.3	252.6	252.6	253.3	254.9
17.5°	3902.1	3274.3	1700.5	546.5	285.4	247.9	234.6	230.7	229.9	231.4	232.2
20°	3873.2	3121.0	1282.2	360.4	248.6	226.0	212.7	205.6	204.8	206.4	208.0
22.5°	3818.5	2931.9	917.1	277.5	224.4	204.8	188.4	182.2	182.2	183.7	185.3
25°	3752.0	2700.5	627.1	235.4	202.5	182.2	166.5	161.0	162.6	166.5	167.4
27.5°	3669.1	2440.0	426.1	201.7	175.9	159.5	147.8	143.8	147.8	153.2	154.8
30°	3598.0	2168.8	304.1	174.3	149.4	137.6	130.5	130.5	136.1	146.2	148.5
32.5°	3543.3	1906.1	234.6	154.1	129.8	119.6	115.7	119.6	128.2	138.4	140.8
35°	3536.2	1689.5	198.6	137.6	115.7	105.6	104.0	111.0	119.6	127.5	129.0
37.5°	3590.1	1489.4	179.0	124.3	103.2	93.8	92.3	100.9	109.5	118.9	121.2
40°	3692.5	1332.2	165.0	111.8	93.1	82.9	79.8	86.0	97.7	110.3	113.3
42.5°	3825.5	1202.5	149.4	99.3	82.9	68.8	64.9	71.9	84.4	97.7	101.7
45°	3952.2	1090.7	132.2	85.2	69.6	53.2	51.6	61.0	67.2	80.5	83.7
47.5°	4021.7	992.2	117.2	69.6	53.9	43.0	43.0	45.3	51.6	67.2	70.4
50°	3998.3	913.2	101.7	51.6	37.5	32.8	32.8	32.0	41.4	53.9	56.3
52.5°	3951.4	867.9	87.6	39.9	25.8	23.4	21.1	23.4	28.9	34.4	35.2
55°	3944.3	860.0	73.4	32.0	18.0	15.7	11.8	11.8	11.8	10.9	9.4
57.5°	3999.0	872.5	61.8	25.8	13.3	10.1	6.2	0.0	0.0	0.0	0.0
60°	4055.4	885.8	53.2	18.0	9.4	5.5	0.8	0.0	0.0	0.0	0.0
62.5°	3961.6	856.1	44.6	10.9	7.1	2.4	0.0	0.0	0.0	0.0	0.0
65°	3480.0	728.6	35.2	7.8	4.7	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	2475.2	487.8	23.4	4.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0
70°	1129.7	204.1	14.8	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	241.6	63.3	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	49.3	46.1	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	15.7	72.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	9.4	52.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	1.5	7.8	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)