

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: P190917

Luminaire Tested: **GLEON-AF-09-LED-E1-AFL-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190917
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: MCGRAW-EDISON
Catalog Number: GLEON-AF-09-LED-E1-AFL-600-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 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: 29360.7 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 290
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

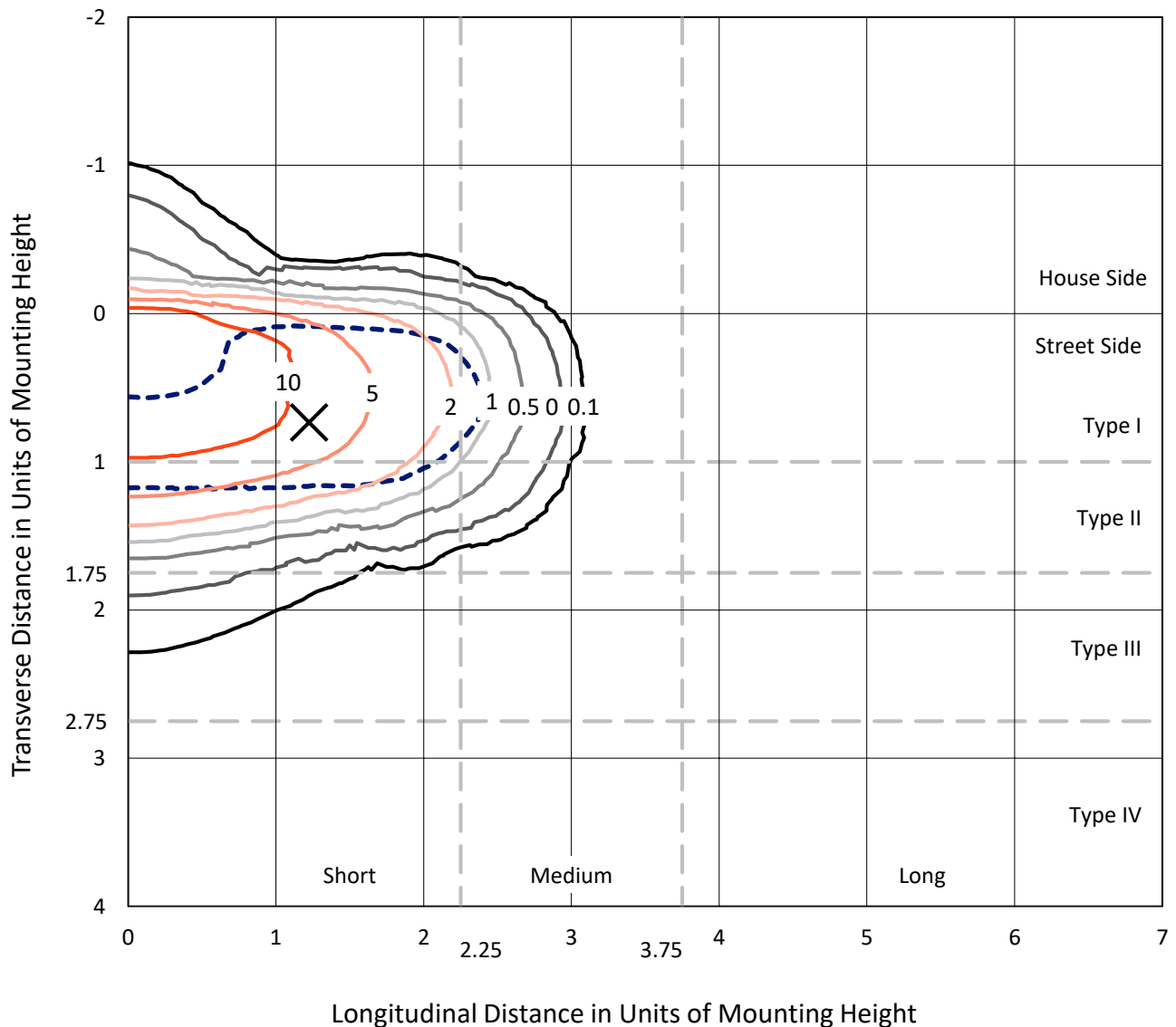


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

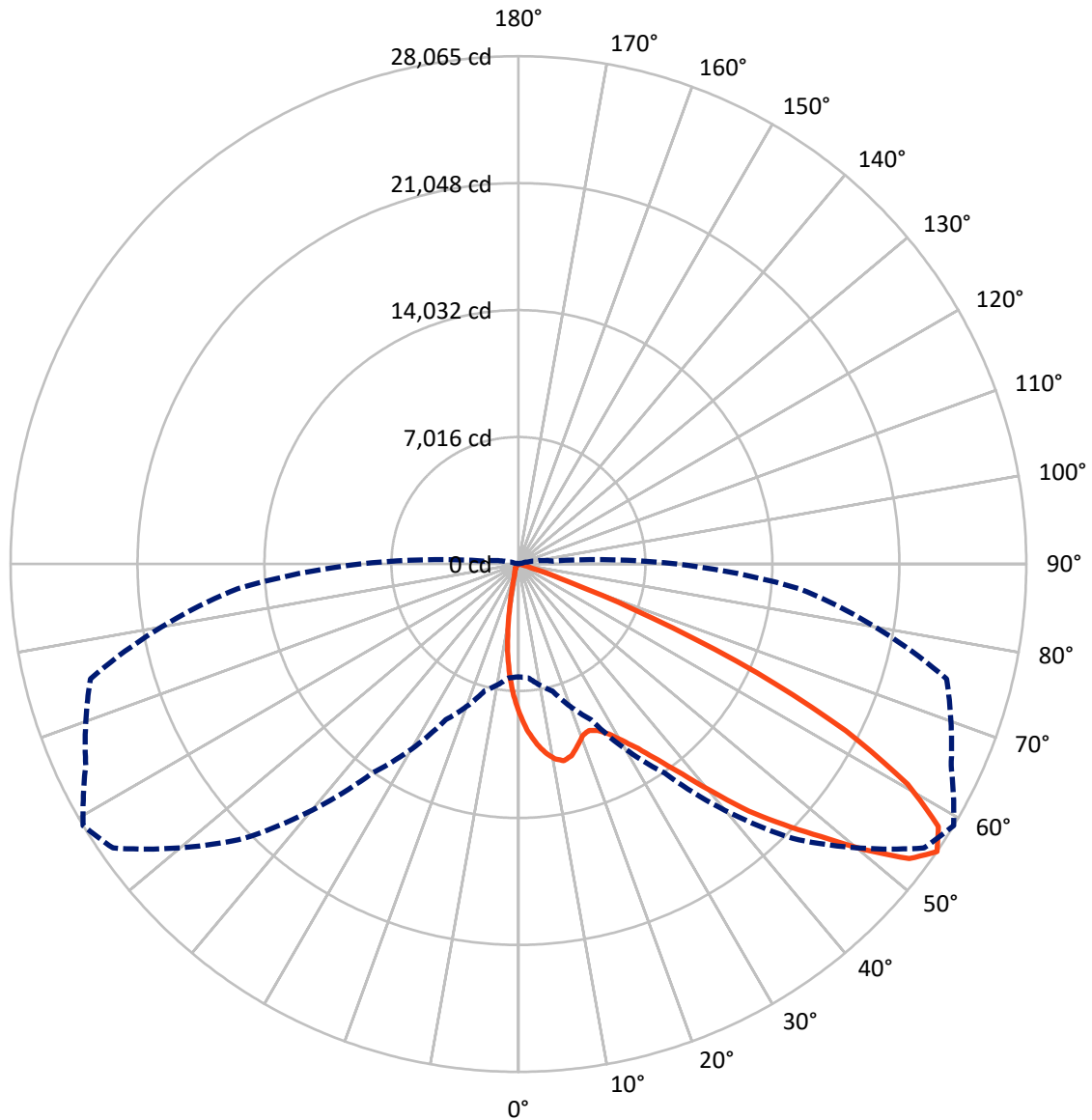


Based on 25 foot mounting height. Maximum calculated value = 16.5 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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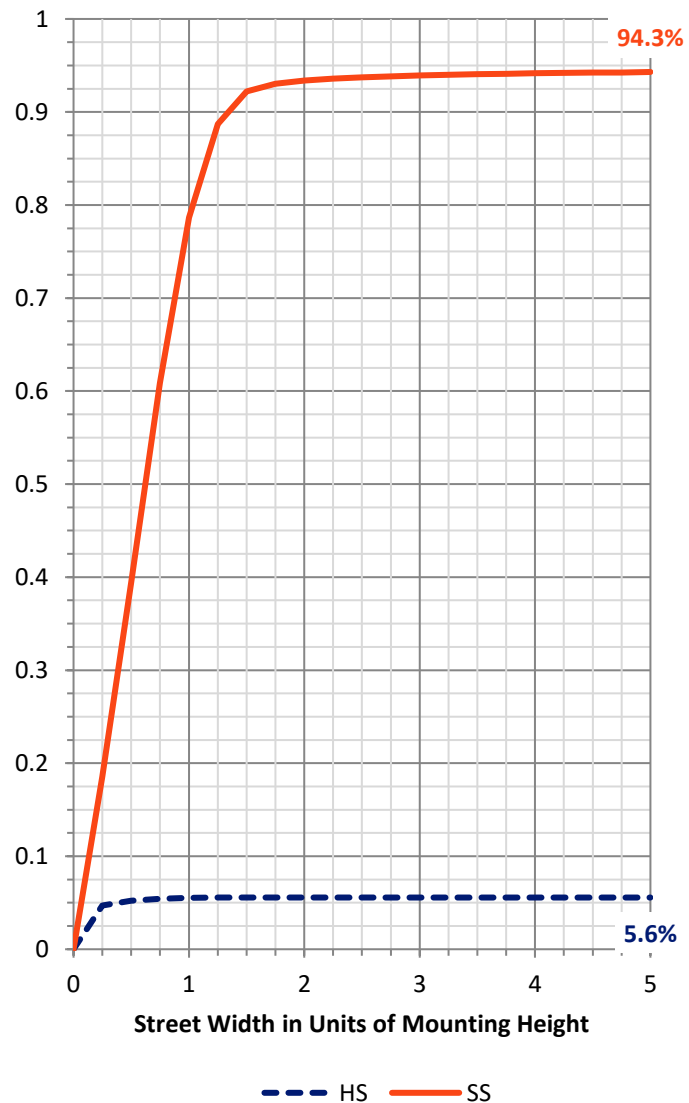
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1640.0	0.0	1640.0
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	27720.8	0.0	27720.8
	% Fixture	94.4	0.0	94.4
Total	Lumens	29360.7	0.0	29360.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	692.3	2.4
10°-20°	1657.5	5.6
20°-30°	2820.4	9.6
30°-40°	4850.5	16.5
40°-50°	7488.7	25.5
50°-60°	7528.5	25.6
60°-70°	3860.7	13.1
70°-80°	418.4	1.4
80°-90°	43.7	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°	29360.7	100.0
0°-180°	29360.7	100.0

Coefficient of Utilization



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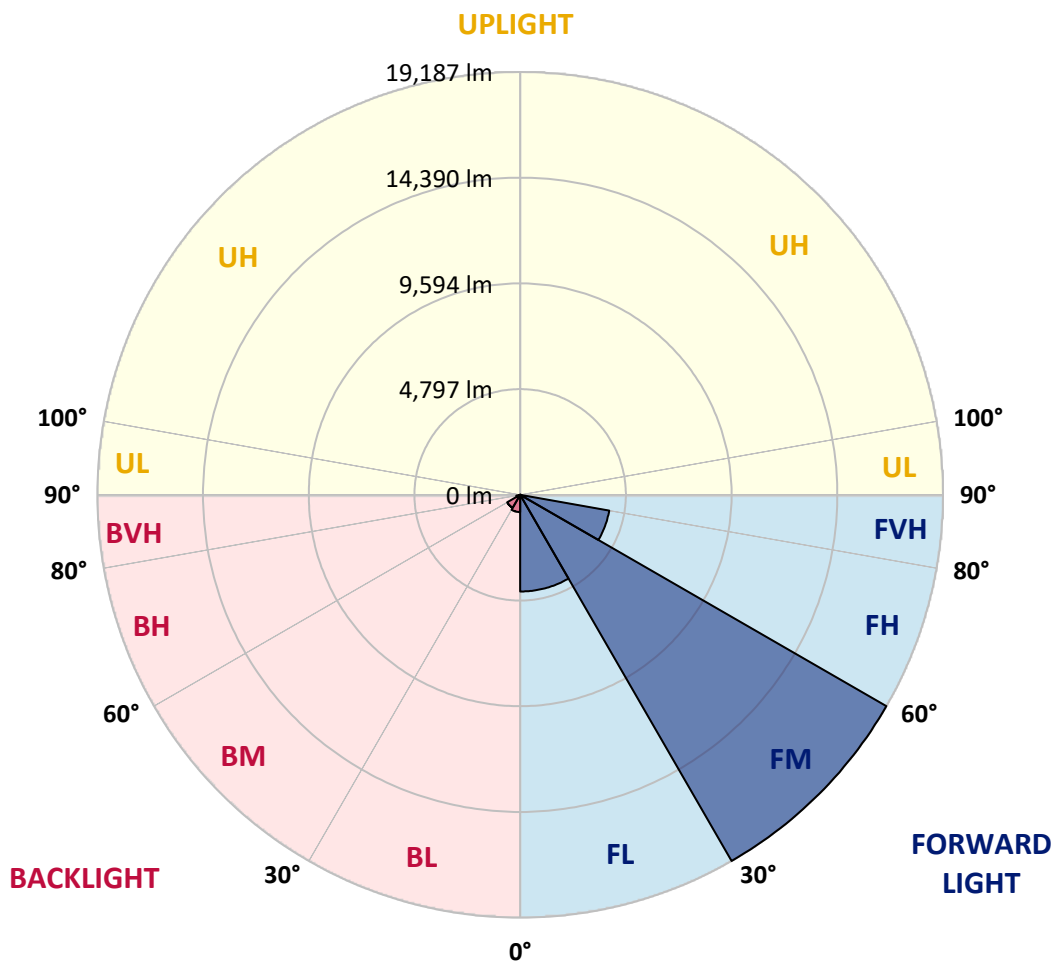
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4387.5	14.9			
FM	(30°-60°)	19187.1	65.3			
FH	(60°-80°)	4103.4	14.0			G2/5000
FVH	(80°-90°)	42.8	0.1			G1/100
BL	(0°-30°)	782.8	2.7	B2/1000		
BM	(30°-60°)	680.6	2.3	B1/1000		
BH	(60°-80°)	175.7	0.6	B1/500		G1/500
BVH	(80°-90°)	0.9	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	8264.9	8264.9	8264.9	8264.9	8264.9	8264.9	8264.9	8264.9	8264.9	8264.9	8264.9
2.5°	9779.3	9675.4	9644.2	9623.4	9528.1	9408.5	9245.6	9169.4	9013.4	8762.2	8453.8
5°	10675.1	10656.1	10586.7	10548.7	10446.4	10276.6	10016.7	9891.9	9644.2	9221.4	8668.7
7.5°	10283.5	10403.1	10498.3	10657.8	10858.8	10851.9	10633.6	10503.6	10226.3	9668.4	8907.8
10°	8770.9	8868.0	9023.9	9386.0	10124.1	10775.7	11032.0	10938.5	10716.7	10079.0	9138.2
12.5°	8474.6	8464.2	8491.9	8597.6	8984.0	9912.7	10964.5	11153.3	11108.3	10455.1	9356.5
15°	8632.3	8620.1	8616.7	8653.0	8746.6	9138.2	10456.8	10999.2	11347.4	10803.4	9542.0
17.5°	9074.1	9022.1	8994.4	8964.9	8937.2	9034.3	9846.9	10567.7	11383.8	11108.3	9696.1
20°	9831.3	9744.6	9642.4	9476.1	9320.1	9271.6	9590.5	10124.1	11253.8	11340.4	9796.6
22.5°	10782.5	10671.6	10495.0	10191.7	9874.6	9690.9	9716.9	9983.8	11059.7	11593.4	9843.4
25°	11851.6	11709.5	11473.9	11052.9	10586.7	10261.0	10091.2	10184.8	10971.5	11889.8	9897.2
27.5°	12996.9	12839.3	12530.8	11957.3	11428.8	10988.7	10642.2	10630.1	11122.1	12277.9	9983.8
30°	14131.9	14107.6	13705.6	13099.2	12399.2	11863.8	11364.7	11300.6	11543.2	12815.0	10155.3
32.5°	15646.2	15464.3	14972.2	14348.4	13541.0	12898.2	12307.3	12158.3	12189.5	13440.4	10420.4
35°	17555.7	17356.4	16663.3	15802.1	14899.4	14140.5	13487.3	13284.6	13208.3	14464.5	10867.4
37.5°	18789.4	18785.9	18350.9	17474.1	16505.6	15668.7	14958.3	14721.0	14566.7	15701.7	11560.6
40°	18822.2	18903.6	18960.8	18952.2	18262.5	17491.5	16860.8	16568.0	16209.4	17354.7	12456.4
42.5°	17812.0	18021.7	18525.9	19381.8	19790.8	19484.1	18952.2	18664.6	18130.9	19123.8	13548.0
45°	16446.7	16592.3	17474.1	19050.9	20619.0	21459.4	21054.0	20539.3	19835.8	20969.1	14526.9
47.5°	15835.1	15861.1	16431.1	18162.1	20681.4	23077.8	23323.8	22486.9	21384.9	22455.7	15292.7
50°	14007.1	14053.9	14840.5	16621.7	19950.2	23841.8	25603.9	24810.4	23074.3	23601.0	15571.7
52.5°	10557.3	10623.1	11621.1	14090.2	17940.3	23516.1	27236.2	27043.9	24924.8	24160.7	15587.3
55°	6229.1	6315.7	7268.7	9484.8	14111.0	21443.8	27357.5	28064.5	26385.5	24491.6	15563.1
57.5°	2909.2	2969.8	3515.7	4886.2	8776.1	16947.4	25531.2	27364.4	27191.2	24666.6	15734.6
60°	1545.6	1562.9	1694.6	2115.7	3966.1	10746.2	21967.1	24709.9	26456.5	24909.2	15944.2
62.5°	1181.7	1186.9	1180.0	1230.2	1666.9	4770.1	16604.4	20314.1	23498.8	24727.3	15712.0
65°	1024.0	1032.7	984.2	972.0	1069.1	1701.5	9864.2	14480.1	18465.3	22272.0	14130.1
67.5°	918.3	921.8	862.9	812.6	829.9	920.0	3891.6	7927.1	12222.4	16325.4	10242.0
70°	845.6	842.1	778.0	698.3	675.8	629.0	1237.2	2905.7	5840.9	8278.8	4763.2
72.5°	748.5	750.2	719.0	615.1	561.4	440.1	573.6	847.3	1743.1	2256.0	1115.8
75°	663.6	655.0	616.8	551.0	462.6	289.4	284.2	377.8	537.2	533.7	240.8
77.5°	480.0	471.3	483.4	452.2	355.2	187.1	142.1	182.0	218.3	211.3	67.6
80°	351.7	346.6	311.9	376.0	313.6	128.2	88.4	97.1	112.6	95.3	20.8
82.5°	240.8	239.1	220.0	208.0	178.5	77.9	55.4	60.7	72.7	53.7	10.4
85°	38.2	43.3	159.4	126.4	105.7	34.7	38.2	41.6	48.5	29.5	3.5
87.5°	0.0	0.0	74.5	65.9	20.8	13.9	22.5	24.2	24.2	15.5	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°	8264.9	8264.9	8264.9	8264.9	8264.9	8264.9	8264.9	8264.9	8264.9	8264.9	8264.9
2.5°	8296.1	8122.8	7802.4	7471.3	7164.6	6799.0	6547.8	6359.0	6140.7	6081.7	6209.9
5°	8353.3	8025.9	7336.2	6586.0	5880.7	5099.3	4501.5	4028.5	3600.6	3455.0	3586.7
7.5°	8443.4	7956.5	6832.0	5596.6	4369.8	3150.1	2314.8	1765.6	1415.6	1311.6	1367.1
10°	8533.6	7856.1	6248.1	4425.3	2748.1	1533.4	998.0	797.1	722.5	707.0	715.6
12.5°	8608.0	7720.9	5535.9	3146.6	1469.4	821.3	653.3	620.3	609.9	609.9	613.4
15°	8653.0	7516.4	4692.2	2001.3	845.6	620.3	570.1	559.7	559.7	561.4	564.9
17.5°	8647.8	7256.5	3768.7	1211.2	632.4	549.2	519.8	511.2	509.4	512.9	514.6
20°	8583.8	6916.9	2841.7	798.7	551.0	500.7	471.3	455.7	454.0	457.5	460.9
22.5°	8462.5	6497.6	2032.4	615.1	497.3	454.0	417.6	403.8	403.8	407.1	410.6
25°	8315.2	5984.7	1389.6	521.5	448.8	403.8	369.1	356.9	360.4	369.1	370.8
27.5°	8131.5	5407.7	944.3	447.0	389.8	353.4	327.4	318.9	327.4	339.6	343.1
30°	7973.8	4806.4	674.0	386.4	330.9	304.9	289.4	289.4	301.5	324.0	329.2
32.5°	7852.6	4224.3	519.8	341.4	287.7	265.1	256.5	265.1	284.2	306.7	311.9
35°	7836.9	3744.3	440.1	304.9	256.5	233.9	230.5	246.0	265.1	282.4	285.9
37.5°	7956.5	3300.8	396.8	275.5	228.7	208.0	204.5	223.5	242.5	263.4	268.5
40°	8183.5	2952.5	365.6	247.8	206.2	183.6	176.8	190.6	216.6	244.3	251.2
42.5°	8478.0	2664.9	330.9	220.0	183.6	152.5	143.8	159.4	187.1	216.6	225.3
45°	8758.7	2417.1	292.9	188.8	154.2	117.8	114.4	135.1	149.0	178.5	185.4
47.5°	8913.0	2198.8	259.9	154.2	119.6	95.3	95.3	100.5	114.4	149.0	155.9
50°	8861.0	2023.8	225.3	114.4	83.2	72.7	72.7	71.0	91.9	119.6	124.8
52.5°	8757.1	1923.2	194.1	88.4	57.2	52.0	46.7	52.0	64.1	76.2	77.9
55°	8741.4	1906.0	162.9	71.0	39.9	34.7	26.0	26.0	26.0	24.2	20.8
57.5°	8862.7	1933.7	136.9	57.2	29.5	22.5	13.9	0.0	0.0	0.0	0.0
60°	8987.4	1963.1	117.8	39.9	20.8	12.2	1.7	0.0	0.0	0.0	0.0
62.5°	8779.6	1897.3	98.7	24.2	15.5	5.2	0.0	0.0	0.0	0.0	0.0
65°	7712.2	1614.8	77.9	17.3	10.4	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	5485.7	1081.2	52.0	10.4	1.7	0.0	0.0	0.0	0.0	0.0	0.0
70°	2503.8	452.2	32.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	535.4	140.3	22.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	109.1	102.2	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	34.7	161.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	20.8	116.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	3.5	17.3	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)