

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: P300705

Luminaire Tested: **GLNA-AF-08-LED-E1-AFL-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300705
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: GLNA-AF-08-LED-E1-AFL-800-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 4000K 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: 28661.6 lumens
Efficiency: N/A
Efficacy: 85.8 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

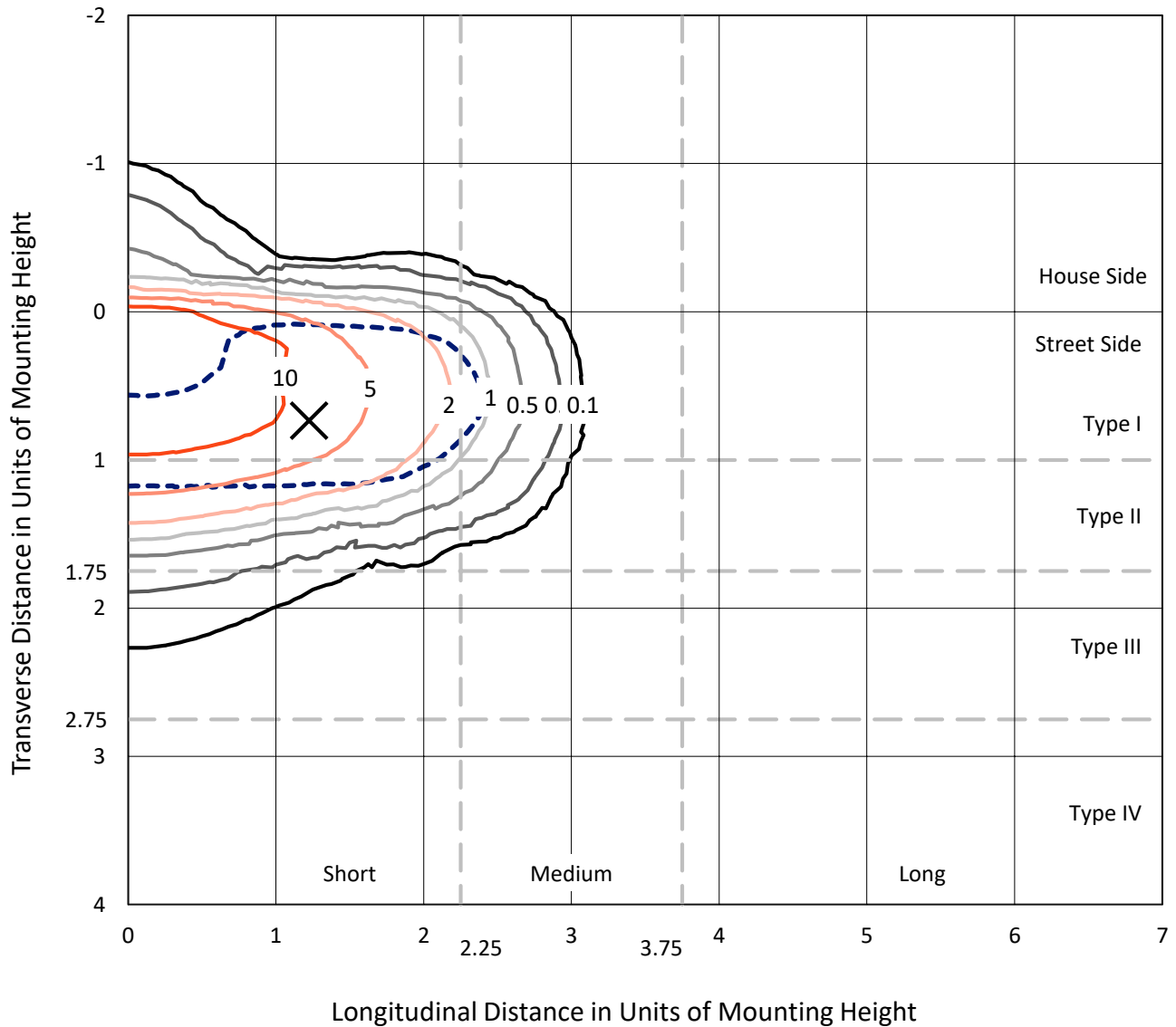
Input Watts (W): 334
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

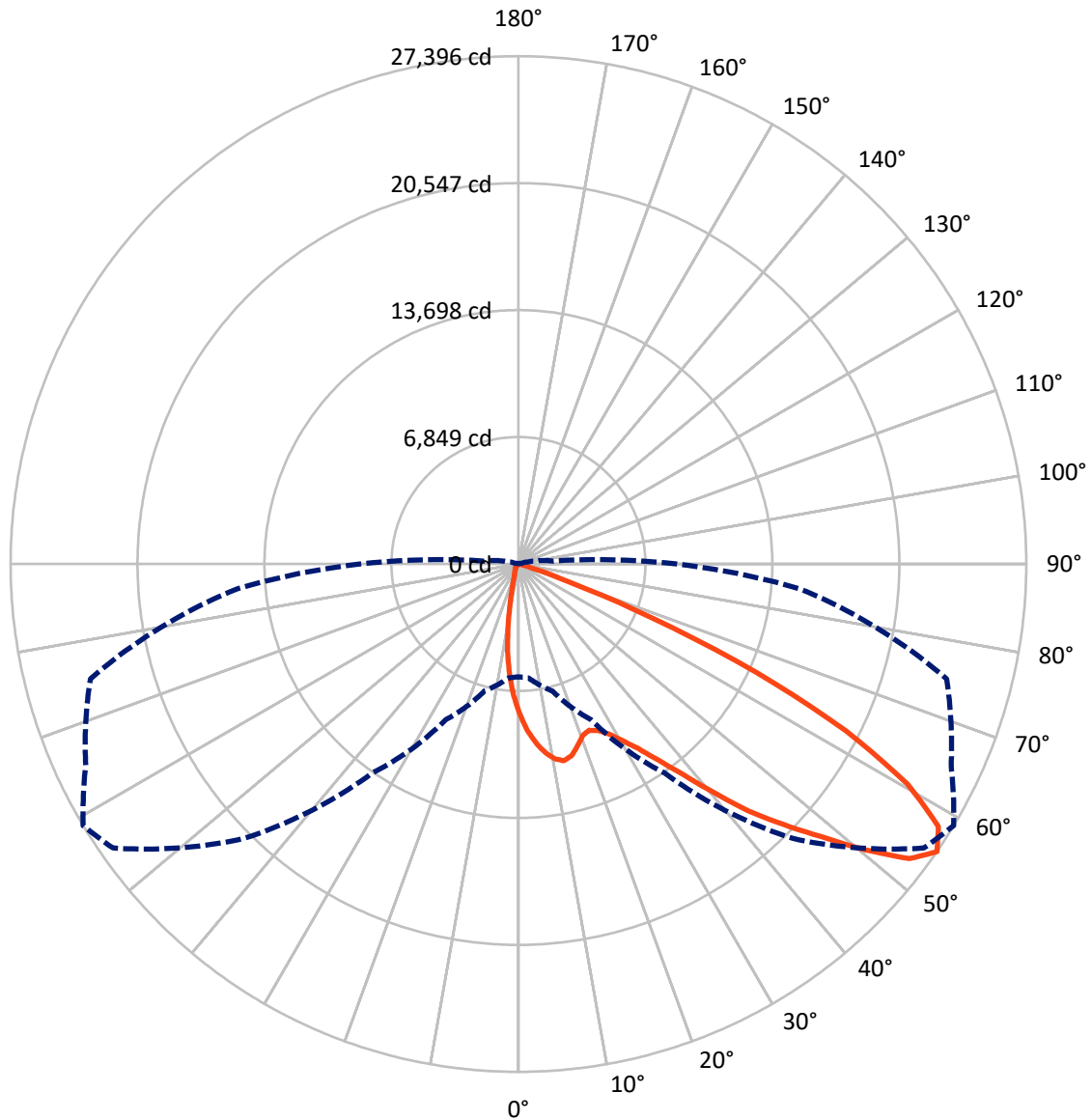
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16.1 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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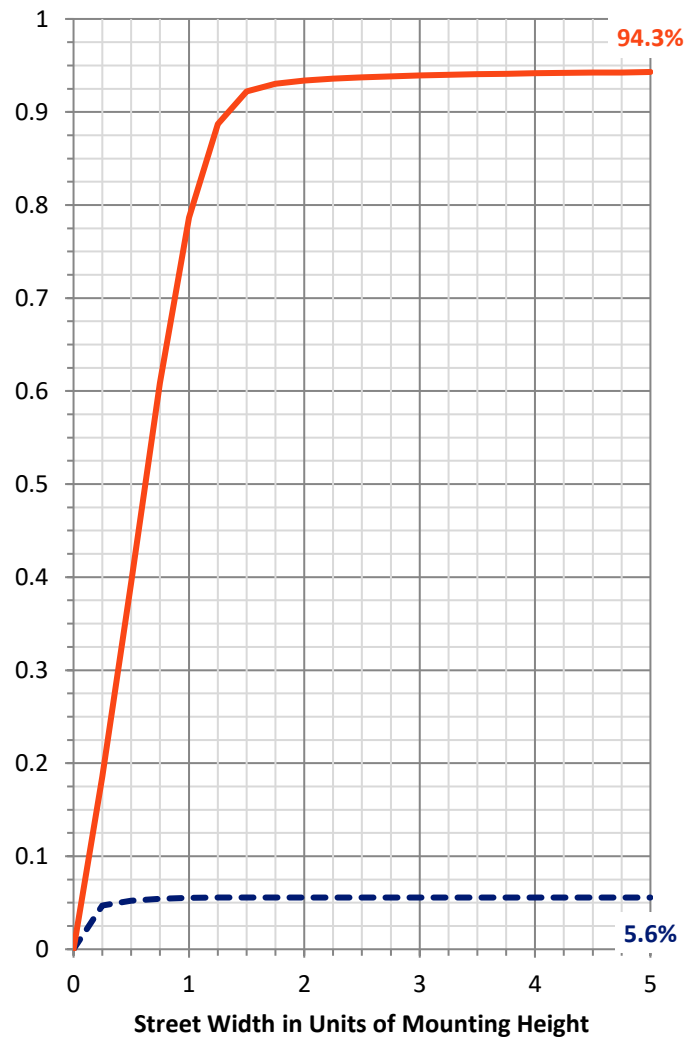
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1600.9	0.0	1600.9
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	27060.7	0.0	27060.7
	% Fixture	94.4	0.0	94.4
Total	Lumens	28661.6	0.0	28661.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	675.8	2.4
10°-20°	1618.0	5.6
20°-30°	2753.3	9.6
30°-40°	4735.0	16.5
40°-50°	7310.4	25.5
50°-60°	7349.2	25.6
60°-70°	3768.7	13.1
70°-80°	408.4	1.4
80°-90°	42.7	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°	28661.6	100.0
0°-180°	28661.6	100.0



--- HS — SS

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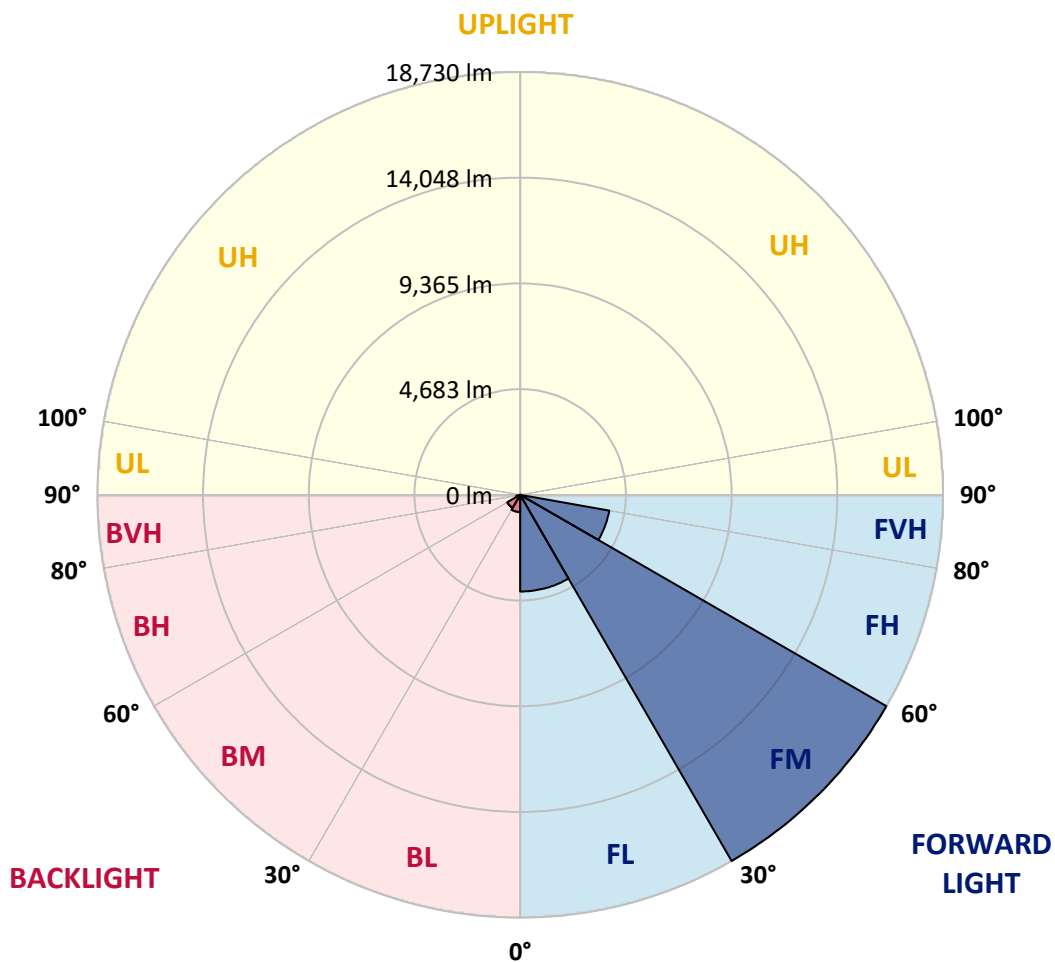
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4283.0	14.9			
FM	(30°-60°)	18730.2	65.3			
FH	(60°-80°)	4005.7	14.0			G2/5000
FVH	(80°-90°)	41.8	0.1			G1/100
BL	(0°-30°)	764.1	2.7	B2/1000		
BM	(30°-60°)	664.4	2.3	B1/1000		
BH	(60°-80°)	171.5	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°	8068.1	8068.1	8068.1	8068.1	8068.1	8068.1	8068.1	8068.1	8068.1	8068.1	8068.1
2.5°	9546.5	9445.0	9414.5	9394.2	9301.2	9184.5	9025.5	8951.1	8798.8	8553.6	8252.5
5°	10420.9	10402.3	10334.7	10297.5	10197.7	10031.9	9778.2	9656.4	9414.5	9001.8	8462.2
7.5°	10038.7	10155.4	10248.4	10404.0	10600.2	10593.5	10380.3	10253.5	9982.8	9438.2	8695.7
10°	8562.0	8656.8	8809.0	9162.5	9883.1	10519.0	10769.4	10678.0	10461.5	9839.1	8920.6
12.5°	8272.8	8262.7	8289.7	8392.9	8770.1	9676.7	10703.4	10887.8	10843.8	10206.1	9133.7
15°	8426.7	8414.9	8411.5	8447.0	8538.4	8920.6	10207.8	10737.2	11077.2	10546.1	9314.7
17.5°	8858.0	8807.3	8780.2	8751.5	8724.4	8819.1	9612.4	10316.1	11112.7	10843.8	9465.3
20°	9597.2	9512.6	9412.8	9250.5	9098.2	9050.9	9362.1	9883.1	10985.9	11070.4	9563.4
22.5°	10525.8	10417.5	10245.0	9949.0	9639.5	9460.2	9485.6	9746.0	10796.4	11317.4	9609.0
25°	11569.4	11430.7	11200.7	10789.7	10334.7	10016.7	9850.9	9942.3	10710.2	11606.6	9661.5
27.5°	12687.5	12533.5	12232.5	11672.6	11156.7	10727.1	10388.8	10377.0	10857.3	11985.5	9746.0
30°	13795.3	13771.7	13379.2	12787.2	12103.9	11581.3	11094.1	11031.5	11268.3	12509.9	9913.5
32.5°	15273.7	15096.1	14615.7	14006.8	13218.6	12591.0	12014.3	11868.8	11899.2	13120.5	10172.3
35°	17137.6	16943.1	16266.5	15425.9	14544.6	13803.8	13166.1	12968.2	12893.8	14120.1	10608.7
37.5°	18341.9	18338.5	17914.0	17058.1	16112.6	15295.6	14602.2	14370.4	14219.9	15327.8	11285.3
40°	18374.1	18453.6	18509.4	18500.9	17827.7	17075.0	16459.4	16173.5	15823.4	16941.4	12159.7
42.5°	17387.9	17592.6	18084.8	18920.4	19319.6	19020.2	18500.9	18220.1	17699.2	18668.4	13225.3
45°	16055.1	16197.2	17058.1	18597.3	20128.1	20948.4	20552.6	20050.3	19363.5	20469.7	14181.0
47.5°	15458.0	15483.4	16039.9	17729.6	20189.0	22528.2	22768.4	21951.4	20875.7	21921.0	14928.6
50°	13673.6	13719.2	14487.1	16225.9	19475.2	23274.1	24994.3	24219.7	22524.8	23039.0	15200.9
52.5°	10305.9	10370.2	11344.5	13754.7	17513.1	22956.2	26587.7	26399.9	24331.3	23585.4	15216.1
55°	6080.7	6165.3	7095.6	9258.9	13775.0	20933.2	26706.1	27396.2	25757.2	23908.4	15192.5
57.5°	2839.9	2899.1	3431.9	4769.8	8567.1	16543.9	24923.3	26712.8	26543.7	24079.3	15359.9
60°	1508.8	1525.7	1654.2	2065.2	3871.7	10490.3	21444.0	24121.5	25826.5	24316.1	15564.6
62.5°	1153.6	1158.6	1151.9	1200.9	1627.2	4656.5	16209.0	19830.4	22939.2	24138.5	15337.9
65°	999.6	1008.1	960.7	948.9	1043.6	1661.0	9629.3	14135.3	18025.6	21741.7	13793.6
67.5°	896.5	899.8	842.3	793.3	810.2	898.2	3799.0	7738.3	11931.4	15936.7	9998.1
70°	825.4	822.0	759.5	681.6	659.7	614.0	1207.7	2836.5	5701.8	8081.7	4649.8
72.5°	730.7	732.4	701.9	600.5	548.0	429.6	559.9	827.1	1701.6	2202.2	1089.3
75°	647.8	639.4	602.2	537.9	451.6	282.5	277.4	368.7	524.3	521.0	235.1
77.5°	468.5	460.1	471.9	441.5	346.7	182.7	138.7	177.6	213.1	206.4	66.0
80°	343.4	338.3	304.5	367.0	306.1	125.2	86.3	94.7	109.9	93.0	20.3
82.5°	235.1	233.4	214.8	203.0	174.2	76.1	54.1	59.2	71.0	52.4	10.1
85°	37.2	42.3	155.6	123.5	103.2	33.8	37.2	40.6	47.4	28.8	3.4
87.5°	0.0	0.0	72.7	64.3	20.3	13.5	22.0	23.7	23.7	15.2	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°	8068.1	8068.1	8068.1	8068.1	8068.1	8068.1	8068.1	8068.1	8068.1	8068.1	8068.1
2.5°	8098.6	7929.4	7616.5	7293.5	6994.1	6637.2	6391.9	6207.6	5994.4	5936.9	6062.1
5°	8154.4	7834.7	7161.5	6429.1	5740.7	4977.9	4394.3	3932.6	3514.8	3372.7	3501.3
7.5°	8242.4	7767.1	6669.3	5463.3	4265.8	3075.0	2259.8	1723.6	1381.9	1280.4	1334.5
10°	8330.3	7669.0	6099.3	4319.9	2682.6	1496.9	974.3	778.1	705.3	690.1	698.6
12.5°	8403.0	7537.0	5404.1	3071.6	1434.3	801.7	637.7	605.5	595.4	595.4	598.8
15°	8447.0	7337.4	4580.4	1953.6	825.4	605.5	556.5	546.3	546.3	548.0	551.4
17.5°	8442.0	7083.7	3678.9	1182.3	617.4	536.2	507.4	499.0	497.3	500.7	502.4
20°	8379.4	6752.2	2774.0	779.8	537.9	488.8	460.1	444.8	443.2	446.5	449.9
22.5°	8261.0	6342.9	1984.1	600.5	485.4	443.2	407.6	394.1	394.1	397.5	400.9
25°	8117.2	5842.2	1356.5	509.1	438.1	394.1	360.3	348.4	351.8	360.3	362.0
27.5°	7937.9	5279.0	921.8	436.4	380.6	345.1	319.7	311.2	319.7	331.5	334.9
30°	7784.0	4692.0	658.0	377.2	323.1	297.7	282.5	282.5	294.3	316.3	321.4
32.5°	7665.6	4123.7	507.4	333.2	280.8	258.8	250.3	258.8	277.4	299.4	304.5
35°	7650.4	3655.2	429.6	297.7	250.3	228.3	225.0	240.2	258.8	275.7	279.1
37.5°	7767.1	3222.2	387.3	268.9	223.3	203.0	199.6	218.2	236.8	257.1	262.2
40°	7988.6	2882.2	356.9	241.9	201.3	179.3	172.5	186.1	211.4	238.5	245.3
42.5°	8276.2	2601.4	323.1	214.8	179.3	148.8	140.4	155.6	182.7	211.4	219.9
45°	8550.2	2359.6	285.9	184.4	150.5	115.0	111.6	131.9	145.5	174.2	181.0
47.5°	8700.7	2146.4	253.7	150.5	116.7	93.0	93.0	98.1	111.6	145.5	152.2
50°	8650.0	1975.6	219.9	111.6	81.2	71.0	71.0	69.3	89.6	116.7	121.8
52.5°	8548.5	1877.5	189.4	86.3	55.8	50.7	45.7	50.7	62.6	74.4	76.1
55°	8533.3	1860.6	159.0	69.3	38.9	33.8	25.4	25.4	25.4	23.7	20.3
57.5°	8651.7	1887.6	133.6	55.8	28.8	22.0	13.5	0.0	0.0	0.0	0.0
60°	8773.5	1916.4	115.0	38.9	20.3	11.8	1.7	0.0	0.0	0.0	0.0
62.5°	8570.5	1852.1	96.4	23.7	15.2	5.1	0.0	0.0	0.0	0.0	0.0
65°	7528.6	1576.4	76.1	16.9	10.1	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	5355.1	1055.5	50.7	10.1	1.7	0.0	0.0	0.0	0.0	0.0	0.0
70°	2444.1	441.5	32.1	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	522.7	137.0	22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	106.6	99.8	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	33.8	157.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	20.3	113.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	3.4	16.9	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)