

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: P300765

Luminaire Tested: **GLNA-AF-08-LED-E1-AFL-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300765
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-600-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline WITH HOUSESIDE SHIELD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23371.3 lumens
Efficiency: N/A
Efficacy: 90.9 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): 257
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

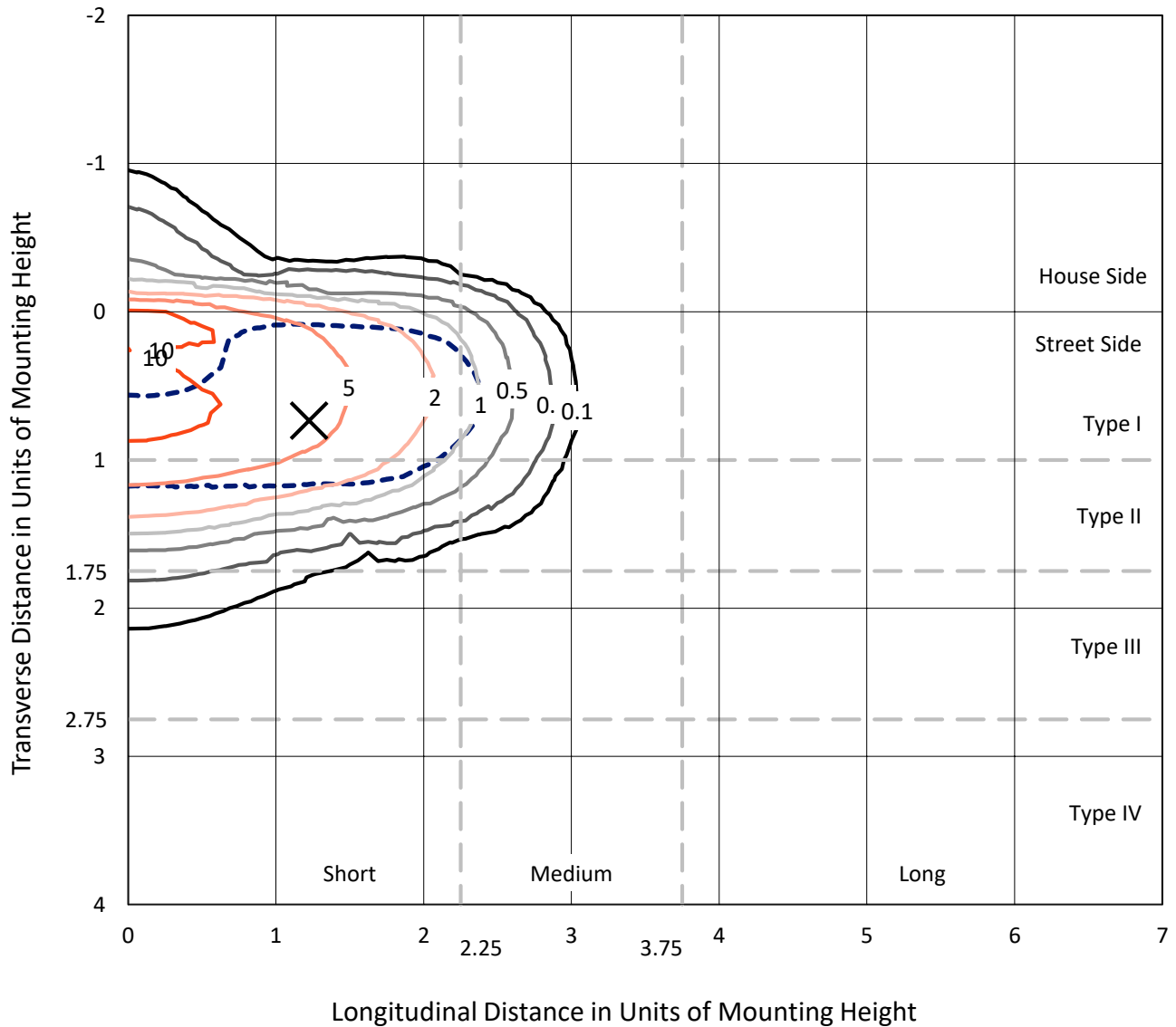


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Iso-Footcandle Lines of Horizontal Illumination

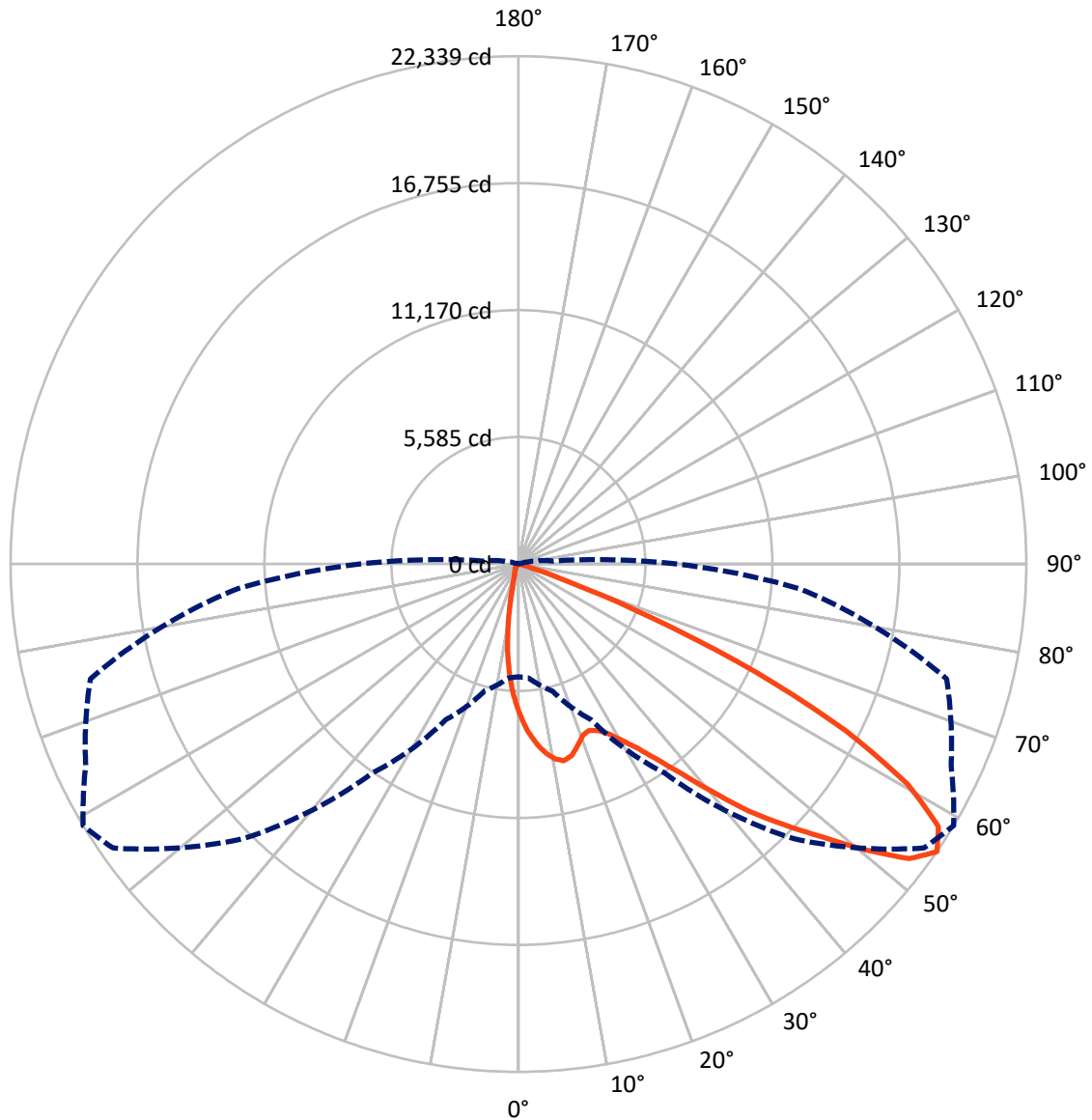
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.1 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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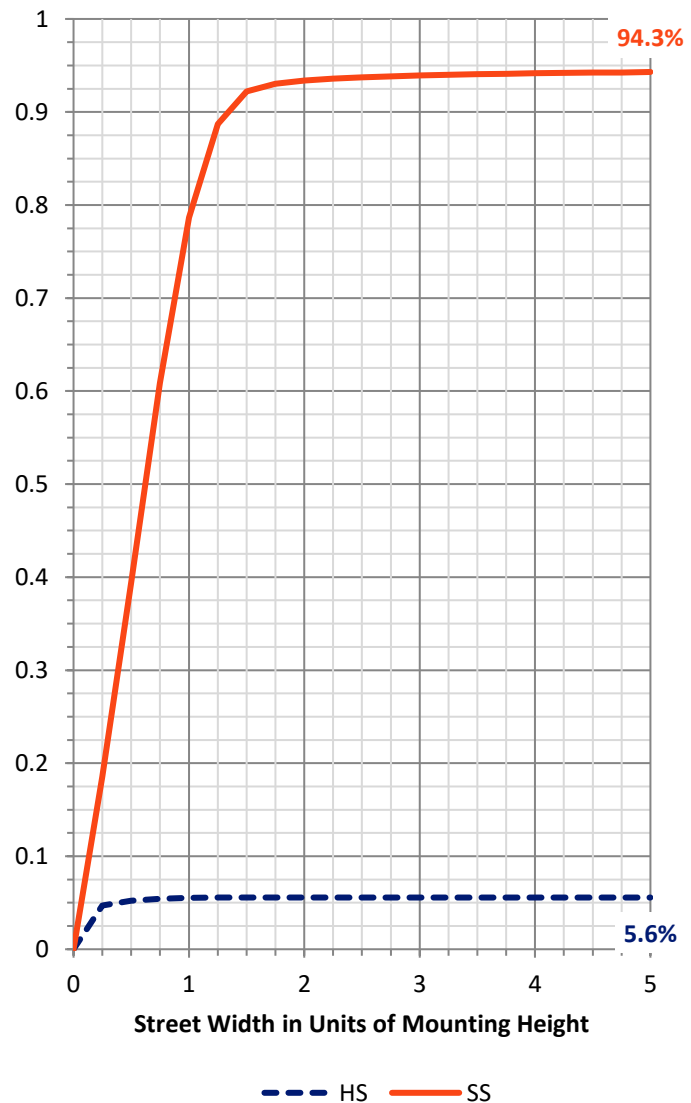
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1305.4	0.0	1305.4
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	22065.9	0.0	22065.9
	% Fixture	94.4	0.0	94.4
Total	Lumens	23371.3	0.0	23371.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	551.1	2.4
10°-20°	1319.4	5.6
20°-30°	2245.1	9.6
30°-40°	3861.0	16.5
40°-50°	5961.0	25.5
50°-60°	5992.7	25.6
60°-70°	3073.1	13.1
70°-80°	333.0	1.4
80°-90°	34.8	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°	23371.3	100.0
0°-180°	23371.3	100.0



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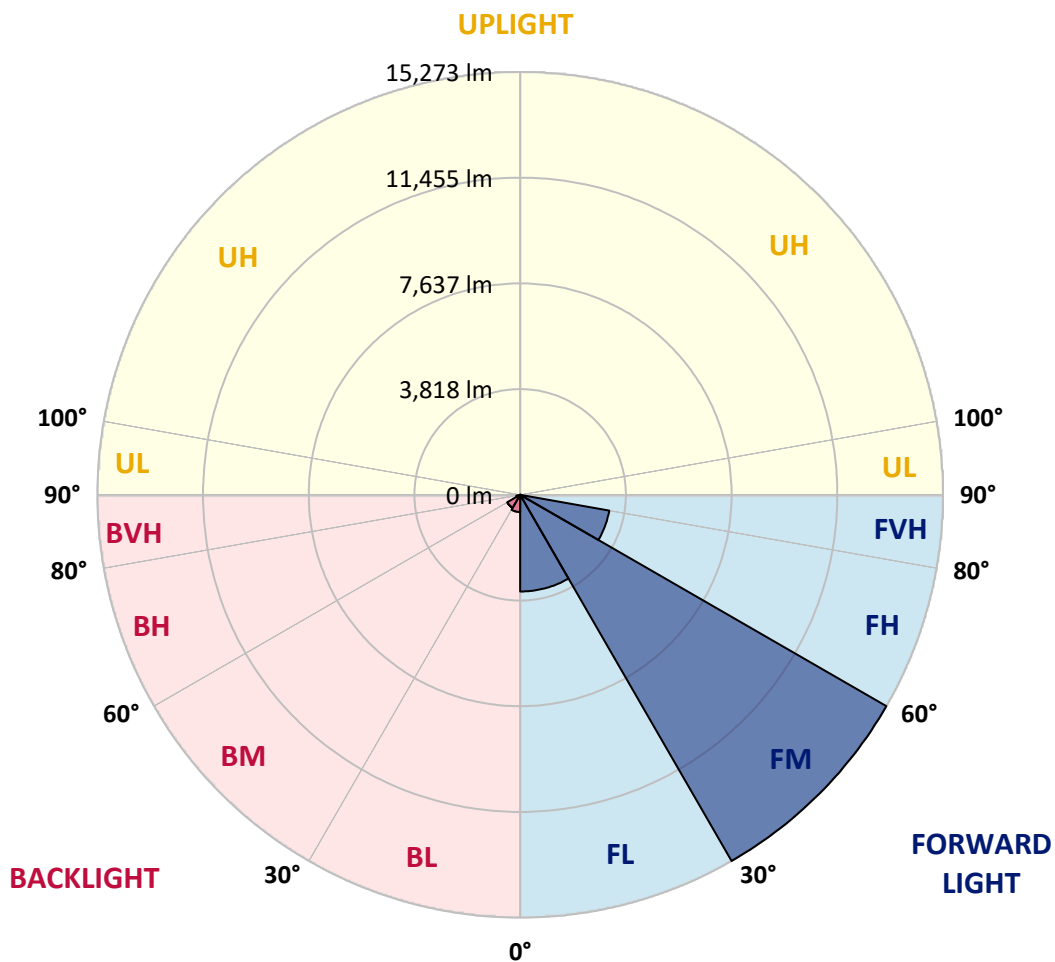
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3492.4	14.9			
FM	(30°-60°)	15273.1	65.3			
FH	(60°-80°)	3266.3	14.0			G2/5000
FVH	(80°-90°)	34.1	0.1			G1/100
BL	(0°-30°)	623.1	2.7	B2/1000		
BM	(30°-60°)	541.8	2.3	B1/1000		
BH	(60°-80°)	139.9	0.6	B1/500		G1/500
BVH	(80°-90°)	0.7	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°	6578.9	6578.9	6578.9	6578.9	6578.9	6578.9	6578.9	6578.9	6578.9	6578.9	6578.9
2.5°	7784.4	7701.6	7676.8	7660.3	7584.4	7489.2	7359.6	7298.9	7174.8	6974.8	6729.3
5°	8497.5	8482.3	8427.1	8396.8	8315.4	8180.2	7973.3	7874.0	7676.8	7340.3	6900.3
7.5°	8185.7	8280.9	8356.8	8483.7	8643.7	8638.1	8464.4	8360.9	8140.2	7696.1	7090.6
10°	6981.7	7058.9	7183.0	7471.3	8058.9	8577.4	8781.6	8707.1	8530.6	8023.0	7274.1
12.5°	6745.8	6737.6	6759.6	6843.8	7151.3	7890.6	8727.8	8878.1	8842.3	8322.3	7447.9
15°	6871.3	6861.7	6858.9	6887.9	6962.4	7274.1	8323.7	8755.4	9032.6	8599.5	7595.4
17.5°	7223.0	7181.7	7159.6	7136.2	7114.1	7191.3	7838.2	8411.9	9061.6	8842.3	7718.2
20°	7825.8	7756.8	7675.4	7543.0	7418.9	7380.3	7634.1	8058.9	8958.1	9027.1	7798.2
22.5°	8583.0	8494.7	8354.0	8112.6	7860.2	7714.0	7734.7	7947.1	8803.6	9228.4	7835.4
25°	9434.0	9320.9	9133.3	8798.1	8427.1	8167.8	8032.7	8107.1	8733.3	9464.3	7878.2
27.5°	10345.6	10220.1	9974.6	9518.1	9097.4	8747.1	8471.2	8461.6	8853.3	9773.2	7947.1
30°	11249.0	11229.7	10909.7	10427.0	9869.8	9443.6	9046.4	8995.4	9188.4	10200.8	8083.7
32.5°	12454.5	12309.7	11918.0	11421.4	10778.7	10267.0	9796.7	9678.1	9702.9	10698.7	8294.7
35°	13974.4	13815.8	13264.1	12578.6	11860.0	11255.9	10735.9	10574.6	10513.9	11513.8	8650.5
37.5°	14956.4	14953.6	14607.5	13909.6	13138.6	12472.4	11906.9	11718.0	11595.2	12498.6	9202.2
40°	14982.6	15047.4	15092.9	15086.0	14537.1	13923.4	13421.3	13188.2	12902.7	13814.4	9915.3
42.5°	14178.5	14345.4	14746.8	15428.1	15753.6	15509.5	15086.0	14857.1	14432.3	15222.6	10784.2
45°	13091.7	13207.5	13909.6	15164.7	16412.9	17081.8	16759.1	16349.4	15789.5	16691.5	11563.5
47.5°	12604.8	12625.5	13079.3	14457.1	16462.5	18370.0	18565.9	17899.7	17022.5	17874.9	12173.1
50°	11149.7	11187.0	11813.1	13231.0	15880.5	18978.2	20380.9	19749.2	18367.2	18786.5	12395.2
52.5°	8403.7	8456.1	9250.5	11215.9	14280.6	18718.9	21680.2	21527.1	19840.3	19232.0	12407.6
55°	4958.3	5027.3	5785.9	7549.9	11232.5	17069.4	21776.7	22339.4	21003.0	19495.5	12388.3
57.5°	2315.7	2364.0	2798.5	3889.4	6985.8	13490.3	20323.0	21782.2	21644.3	19634.8	12524.8
60°	1230.3	1244.1	1348.9	1684.0	3157.1	8554.0	17485.9	19669.2	21059.5	19827.9	12691.7
62.5°	940.6	944.8	939.3	979.3	1326.8	3797.0	13217.2	16170.1	18705.2	19683.0	12506.9
65°	815.1	822.0	783.4	773.7	851.0	1354.4	7852.0	11526.2	14698.5	17728.7	11247.6
67.5°	731.0	733.8	686.9	646.9	660.7	732.4	3097.8	6310.0	9729.1	12995.1	8152.6
70°	673.1	670.3	619.3	555.8	537.9	500.7	984.8	2313.0	4649.4	6590.0	3791.5
72.5°	595.8	597.2	572.4	489.6	446.9	350.3	456.5	674.4	1387.5	1795.8	888.2
75°	528.2	521.4	491.0	438.6	368.3	230.3	226.2	300.7	427.6	424.8	191.7
77.5°	382.0	375.2	384.8	360.0	282.7	149.0	113.1	144.8	173.8	168.3	53.8
80°	280.0	275.8	248.3	299.3	249.6	102.1	70.3	77.2	89.7	75.9	16.6
82.5°	191.7	190.3	175.2	165.5	142.1	62.1	44.1	48.3	57.9	42.8	8.3
85°	30.3	34.5	126.9	100.7	84.1	27.6	30.3	33.1	38.6	23.4	2.8
87.5°	0.0	0.0	59.3	52.4	16.6	11.0	17.9	19.3	19.3	12.4	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°	6578.9	6578.9	6578.9	6578.9	6578.9	6578.9	6578.9	6578.9	6578.9	6578.9	6578.9
2.5°	6603.8	6465.8	6210.7	5947.3	5703.1	5412.1	5212.1	5061.8	4888.0	4841.1	4943.2
5°	6649.3	6388.6	5839.7	5242.5	4681.1	4059.1	3583.2	3206.7	2866.0	2750.2	2855.0
7.5°	6721.0	6333.4	5438.3	4454.9	3478.4	2507.4	1842.7	1405.4	1126.8	1044.1	1088.2
10°	6792.7	6253.4	4973.5	3522.6	2187.5	1220.6	794.4	634.4	575.1	562.7	569.6
12.5°	6852.0	6145.9	4406.6	2504.7	1169.6	653.8	520.0	493.8	485.5	485.5	488.2
15°	6887.9	5983.1	3735.0	1593.0	673.1	493.8	453.8	445.5	445.5	446.9	449.6
17.5°	6883.8	5776.2	2999.8	964.1	503.4	437.2	413.8	406.9	405.5	408.3	409.6
20°	6832.7	5505.9	2261.9	635.8	438.6	398.6	375.2	362.7	361.4	364.1	366.9
22.5°	6736.2	5172.1	1617.8	489.6	395.8	361.4	332.4	321.4	321.4	324.1	326.9
25°	6618.9	4763.9	1106.1	415.1	357.2	321.4	293.8	284.1	286.9	293.8	295.2
27.5°	6472.7	4304.6	751.7	355.8	310.3	281.4	260.7	253.8	260.7	270.3	273.1
30°	6347.2	3826.0	536.5	307.6	263.4	242.7	230.3	230.3	240.0	257.9	262.1
32.5°	6250.7	3362.6	413.8	271.7	229.0	211.0	204.1	211.0	226.2	244.1	248.3
35°	6238.3	2980.5	350.3	242.7	204.1	186.2	183.4	195.9	211.0	224.8	227.6
37.5°	6333.4	2627.4	315.8	219.3	182.1	165.5	162.7	177.9	193.1	209.6	213.8
40°	6514.1	2350.2	291.0	197.2	164.1	146.2	140.7	151.7	172.4	194.5	200.0
42.5°	6748.6	2121.3	263.4	175.2	146.2	121.4	114.5	126.9	149.0	172.4	179.3
45°	6972.0	1924.0	233.1	150.3	122.8	93.8	91.0	107.6	118.6	142.1	147.6
47.5°	7094.8	1750.2	206.9	122.8	95.2	75.9	75.9	80.0	91.0	118.6	124.1
50°	7053.4	1610.9	179.3	91.0	66.2	57.9	57.9	56.5	73.1	95.2	99.3
52.5°	6970.6	1530.9	154.5	70.3	45.5	41.4	37.2	41.4	51.0	60.7	62.1
55°	6958.2	1517.2	129.6	56.5	31.7	27.6	20.7	20.7	20.7	19.3	16.6
57.5°	7054.8	1539.2	109.0	45.5	23.4	17.9	11.0	0.0	0.0	0.0	0.0
60°	7154.1	1562.7	93.8	31.7	16.6	9.7	1.4	0.0	0.0	0.0	0.0
62.5°	6988.6	1510.3	78.6	19.3	12.4	4.1	0.0	0.0	0.0	0.0	0.0
65°	6139.0	1285.4	62.1	13.8	8.3	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	4366.7	860.6	41.4	8.3	1.4	0.0	0.0	0.0	0.0	0.0	0.0
70°	1993.0	360.0	26.2	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	426.2	111.7	17.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	86.9	81.4	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	27.6	128.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	16.6	92.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	2.8	13.8	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)