

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: P299436

Luminaire Tested: **GLNA-AF-07-LED-E1-5NQ-7060-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299436
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-07-LED-E1-5NQ-7060-800
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 5700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34965.7 lumens
Efficiency: N/A
Efficacy: 118.5 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 295
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

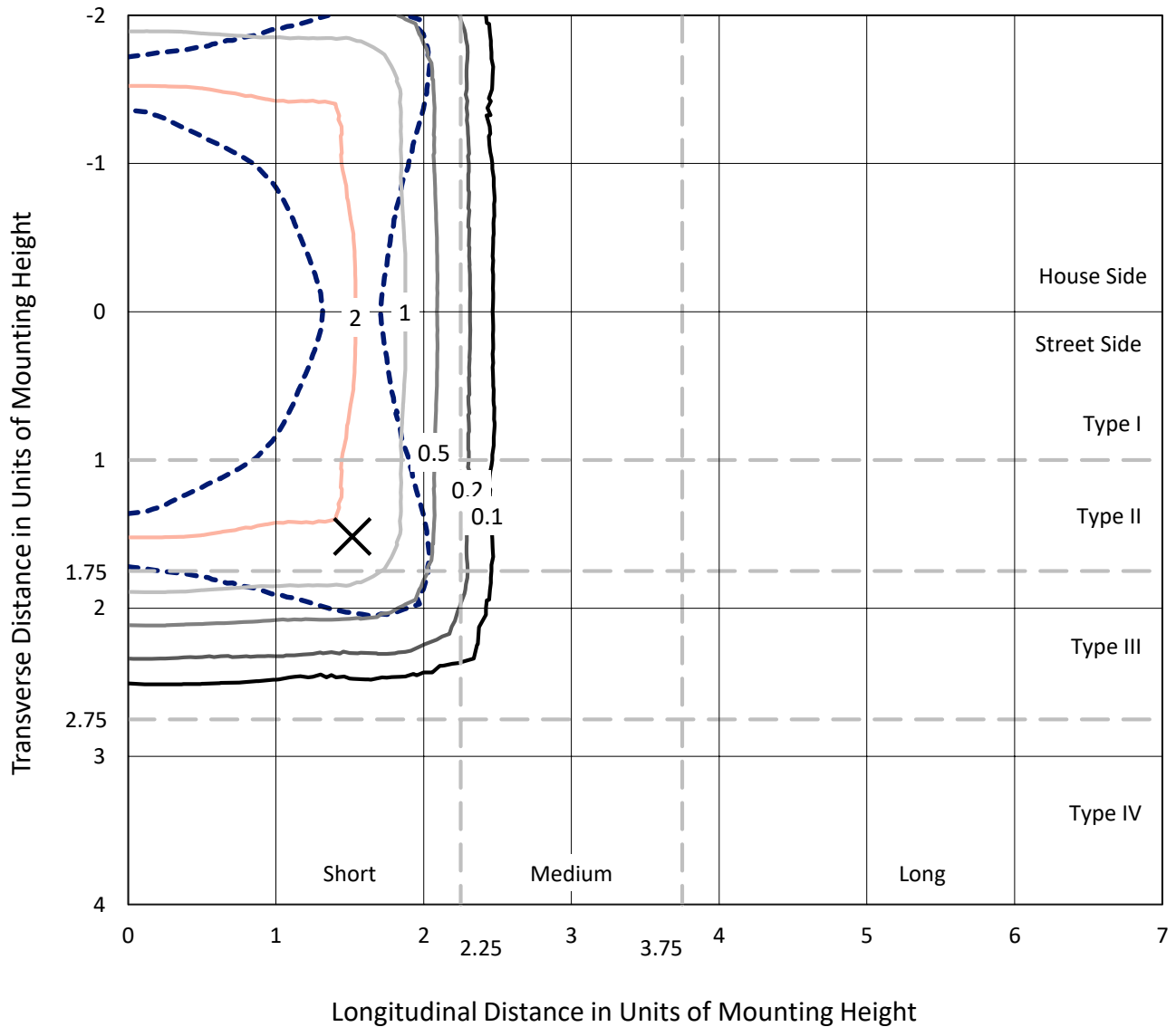


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Iso-Footcandle Lines of Horizontal Illumination

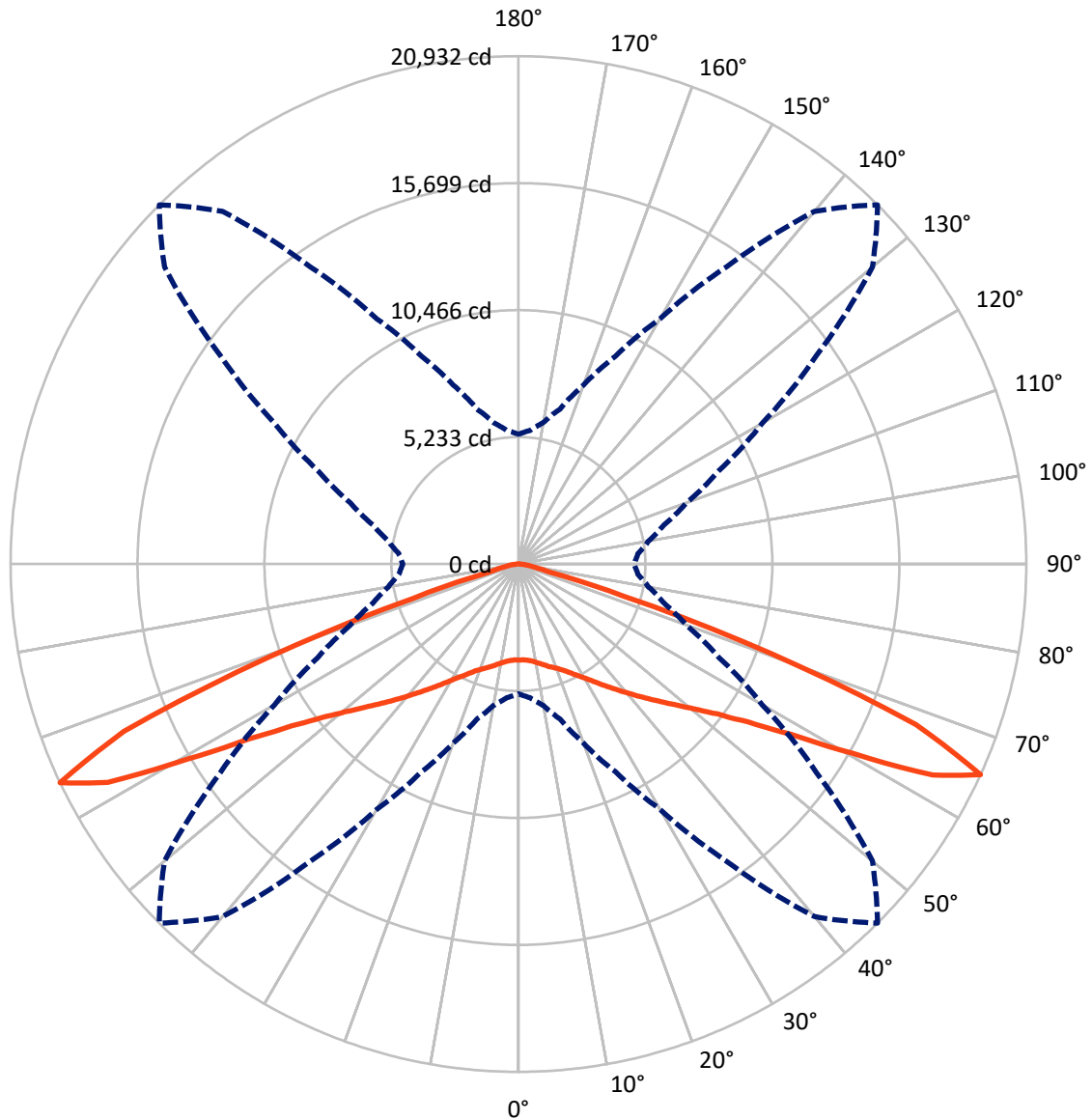
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.4 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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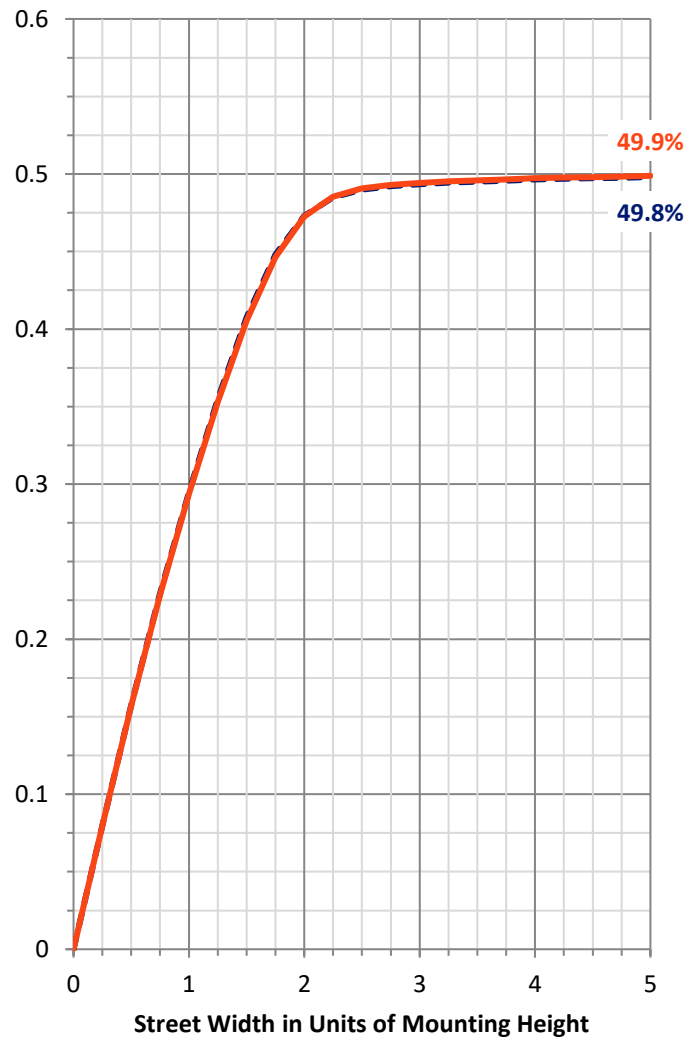
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	17482.9	0.0	17482.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	17482.9	0.0	17482.9
	% Fixture	50.0	0.0	50.0
Total	Lumens	34965.7	0.0	34965.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	385.6	1.1
10°-20°	1236.8	3.5
20°-30°	2312.5	6.6
30°-40°	3911.1	11.2
40°-50°	6395.0	18.3
50°-60°	10169.1	29.1
60°-70°	9192.2	26.3
70°-80°	1163.3	3.3
80°-90°	200.1	0.6
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°	34965.7	100.0
0°-180°	34965.7	100.0



--- HS — SS

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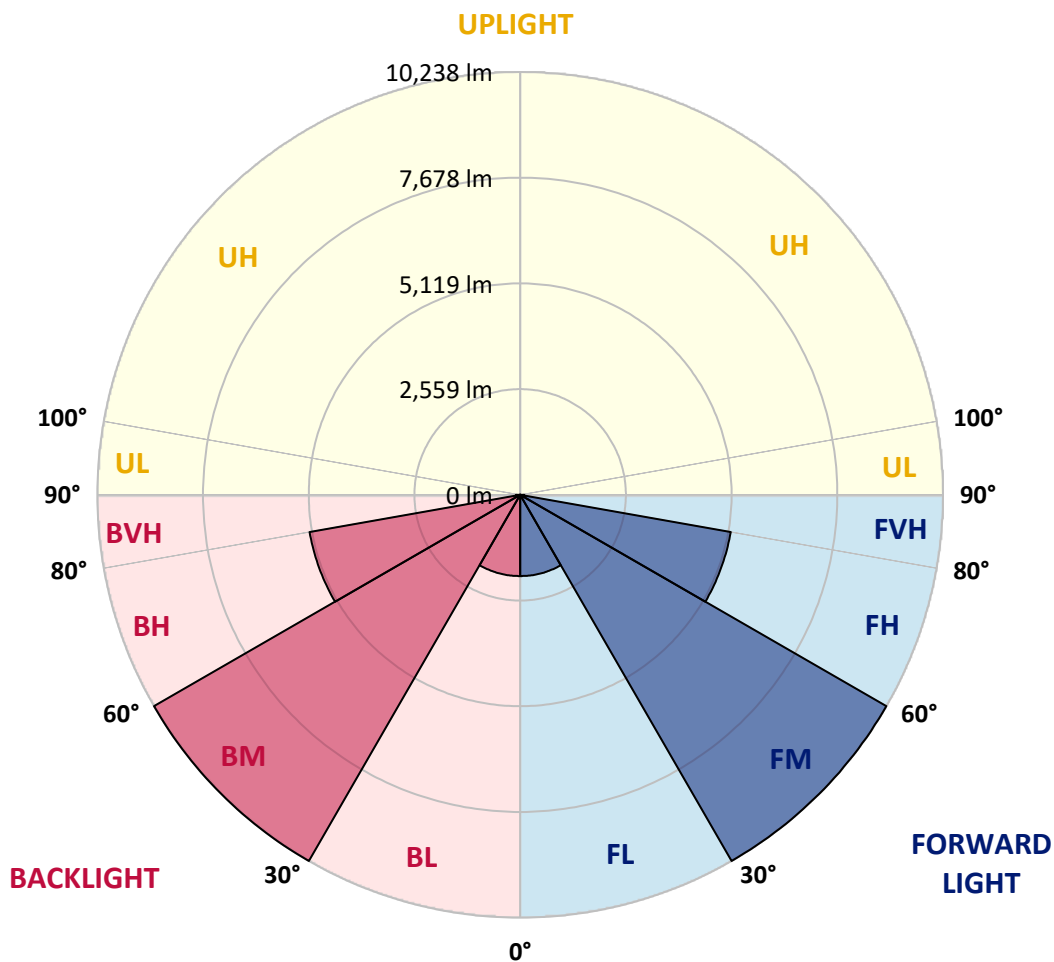
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1967.4	5.6			
FM (30°-60°)	10237.6	29.3			
FH (60°-80°)	5177.8	14.8			G3/7500
FVH (80°-90°)	100.1	0.3			G2/225
BL (0°-30°)	1967.4	5.6	B3/2500		
BM (30°-60°)	10237.6	29.3	B5		
BH (60°-80°)	5177.8	14.8	B5		G3/7500
BVH (80°-90°)	100.1	0.3			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4
2.5°	3959.7	3962.9	3966.2	3962.9	3966.2	3961.3	3958.0	3962.9	3958.0	3953.1	3956.4
5°	3994.1	3995.7	3995.7	3990.8	3995.7	3992.4	3987.5	3994.1	3989.1	3984.2	3987.5
7.5°	4051.4	4057.9	4053.0	4048.1	4051.4	4048.1	4044.8	4046.5	4044.8	4039.9	4041.5
10°	4128.3	4133.2	4130.0	4128.3	4131.6	4130.0	4126.7	4125.1	4126.7	4121.8	4121.8
12.5°	4221.7	4220.0	4218.4	4220.0	4225.0	4225.0	4223.3	4225.0	4228.2	4229.9	4226.6
15°	4313.4	4316.7	4316.7	4316.7	4326.5	4334.7	4339.6	4342.9	4349.4	4351.0	4344.5
17.5°	4428.0	4428.0	4426.4	4428.0	4437.8	4450.9	4455.9	4462.4	4469.0	4473.9	4465.7
20°	4555.7	4559.0	4559.0	4562.3	4575.4	4590.1	4590.1	4593.4	4590.1	4593.4	4588.5
22.5°	4711.3	4721.1	4721.1	4722.8	4735.9	4753.9	4749.0	4753.9	4745.7	4752.3	4745.7
25°	4914.4	4929.1	4925.8	4925.8	4935.7	4947.1	4948.8	4958.6	4957.0	4965.1	4960.2
27.5°	5143.6	5166.6	5173.1	5171.5	5178.0	5189.5	5192.8	5204.2	5197.7	5204.2	5201.0
30°	5418.7	5428.6	5441.7	5446.6	5454.8	5466.2	5466.2	5467.9	5459.7	5469.5	5474.4
32.5°	5703.7	5721.7	5734.8	5764.3	5779.0	5787.2	5785.6	5788.8	5780.7	5793.8	5803.6
35°	6080.3	6093.4	6114.7	6137.6	6157.3	6155.7	6150.7	6152.4	6152.4	6163.8	6173.7
37.5°	6533.9	6537.2	6565.1	6597.8	6607.6	6597.8	6568.3	6561.8	6547.0	6561.8	6578.2
40°	7013.8	7025.2	7080.9	7102.2	7107.1	7089.1	7046.5	7021.9	6989.2	7007.2	7030.1
42.5°	7516.5	7539.4	7590.2	7627.8	7644.2	7632.8	7573.8	7536.1	7493.6	7503.4	7526.3
45°	8073.3	8101.1	8173.2	8209.2	8240.3	8222.3	8165.0	8107.7	8040.5	8045.4	8081.5
47.5°	8695.5	8723.4	8816.7	8877.3	8893.7	8890.4	8826.6	8747.9	8656.2	8653.0	8684.1
50°	9393.2	9421.0	9537.3	9630.6	9678.1	9673.2	9597.9	9486.5	9375.1	9376.8	9416.1
52.5°	10074.4	10108.8	10230.0	10390.4	10483.8	10550.9	10505.1	10400.3	10264.3	10267.6	10303.6
55°	10713.0	10770.4	10909.6	11127.4	11300.9	11489.3	11543.3	11540.0	11458.1	11481.1	11517.1
57.5°	11022.5	11107.7	11322.2	11666.1	12019.8	12403.0	12727.3	12969.6	13072.8	13228.4	13192.3
60°	10436.3	10572.2	10888.3	11394.3	12093.5	12892.7	13749.1	14585.9	15299.9	15838.7	15529.2
62.5°	8544.9	8721.7	9104.9	9753.4	10811.3	12090.2	13729.5	15707.7	17862.7	19163.0	18234.4
65°	5346.7	5530.1	5919.8	6614.2	7852.2	9442.3	11666.1	14944.5	18971.4	20931.5	19041.8
67.5°	2084.6	2184.5	2395.8	2839.6	3769.7	5184.6	7416.6	11137.2	15953.3	17671.1	15656.9
70°	1044.8	1054.6	1093.9	1175.8	1375.6	1786.6	2718.4	5163.3	9149.2	11050.4	8820.0
72.5°	754.9	756.6	776.2	812.2	876.1	967.8	1144.7	1580.3	2975.5	4547.6	2788.8
75°	578.1	584.6	596.1	615.7	650.1	696.0	759.8	910.5	1128.3	1308.4	1100.5
77.5°	445.4	458.5	466.7	484.7	506.0	537.1	555.1	612.5	712.3	750.0	738.5
80°	339.0	350.4	368.5	383.2	397.9	412.7	406.1	432.3	484.7	515.8	499.5
82.5°	216.2	229.3	281.7	294.8	301.3	311.1	299.7	301.3	324.2	343.9	324.2
85°	139.2	147.4	178.5	194.9	196.5	203.1	198.1	186.7	186.7	170.3	191.6
87.5°	63.9	65.5	80.2	95.0	98.3	88.4	86.8	83.5	67.1	63.9	68.8
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4
2.5°	3954.8	3958.0	3959.7	3964.6	3966.2	3966.2	3967.9	3971.1
5°	3985.9	3990.8	3992.4	3999.0	4000.6	3999.0	4002.2	4003.9
7.5°	4041.5	4049.7	4053.0	4059.6	4054.6	4061.2	4062.8	4062.8
10°	4123.4	4131.6	4133.2	4139.8	4136.5	4139.8	4139.8	4136.5
12.5°	4231.5	4233.1	4228.2	4233.1	4226.6	4229.9	4225.0	4221.7
15°	4351.0	4346.1	4334.7	4334.7	4324.8	4326.5	4324.8	4323.2
17.5°	4467.3	4457.5	4449.3	4446.0	4437.8	4436.2	4431.3	4431.3
20°	4595.0	4590.1	4585.2	4578.7	4570.5	4562.3	4560.7	4563.9
22.5°	4749.0	4747.3	4747.3	4744.1	4732.6	4724.4	4719.5	4719.5
25°	4955.3	4940.6	4940.6	4938.9	4934.0	4929.1	4919.3	4924.2
27.5°	5187.9	5179.7	5186.2	5184.6	5179.7	5179.7	5173.1	5173.1
30°	5474.4	5471.2	5481.0	5472.8	5456.4	5454.8	5448.2	5440.0
32.5°	5805.2	5801.9	5816.7	5806.9	5780.7	5765.9	5752.8	5746.3
35°	6173.7	6175.3	6193.3	6186.8	6157.3	6147.5	6124.5	6121.3
37.5°	6576.5	6602.7	6633.8	6640.4	6615.8	6609.3	6584.7	6571.6
40°	7049.8	7084.2	7131.7	7143.1	7116.9	7112.0	7077.6	7059.6
42.5°	7554.2	7613.1	7672.1	7681.9	7655.7	7629.5	7596.7	7583.6
45°	8117.5	8187.9	8264.9	8284.5	8245.2	8214.1	8171.5	8171.5
47.5°	8749.6	8838.0	8924.8	8978.8	8942.8	8910.1	8859.3	8826.6
50°	9496.3	9617.5	9730.5	9786.2	9728.9	9666.6	9578.2	9548.7
52.5°	10433.0	10564.0	10662.3	10632.8	10544.4	10457.6	10361.0	10321.7
55°	11628.4	11672.7	11672.7	11561.3	11384.5	11238.7	11086.4	11035.6
57.5°	13123.6	12953.3	12691.2	12358.8	11941.2	11577.7	11332.0	11215.8
60°	14880.7	14061.9	13136.7	12227.8	11481.1	10865.3	10500.2	10333.1
62.5°	16051.6	13909.6	12055.9	10596.8	9522.5	8780.7	8276.3	8079.8
65°	15001.9	11600.6	9118.0	7372.4	6201.5	5446.6	4947.1	4763.7
67.5°	10988.2	7269.2	4855.4	3479.9	2549.7	2033.9	1829.2	1744.0
70°	4932.4	2559.5	1568.8	1224.9	1056.2	969.4	931.8	918.7
72.5°	1486.9	1075.9	907.2	818.8	751.6	709.1	678.0	674.7
75°	897.4	746.7	663.2	610.8	568.2	533.9	517.5	512.6
77.5°	627.2	548.6	509.3	471.6	438.9	412.7	397.9	386.5
80°	440.5	402.8	384.8	363.5	342.3	317.7	296.4	286.6
82.5°	294.8	286.6	286.6	273.5	255.5	232.5	190.0	180.1
85°	190.0	188.3	191.6	186.7	173.6	149.0	122.8	116.3
87.5°	88.4	90.1	99.9	98.3	95.0	78.6	62.2	59.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)