

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: P458914

Luminaire Tested: **GALN-SA4B-735-U-T3R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P458914
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4B-735-U-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 3500K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21458 lumens
Efficiency: N/A
Efficacy: 130.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

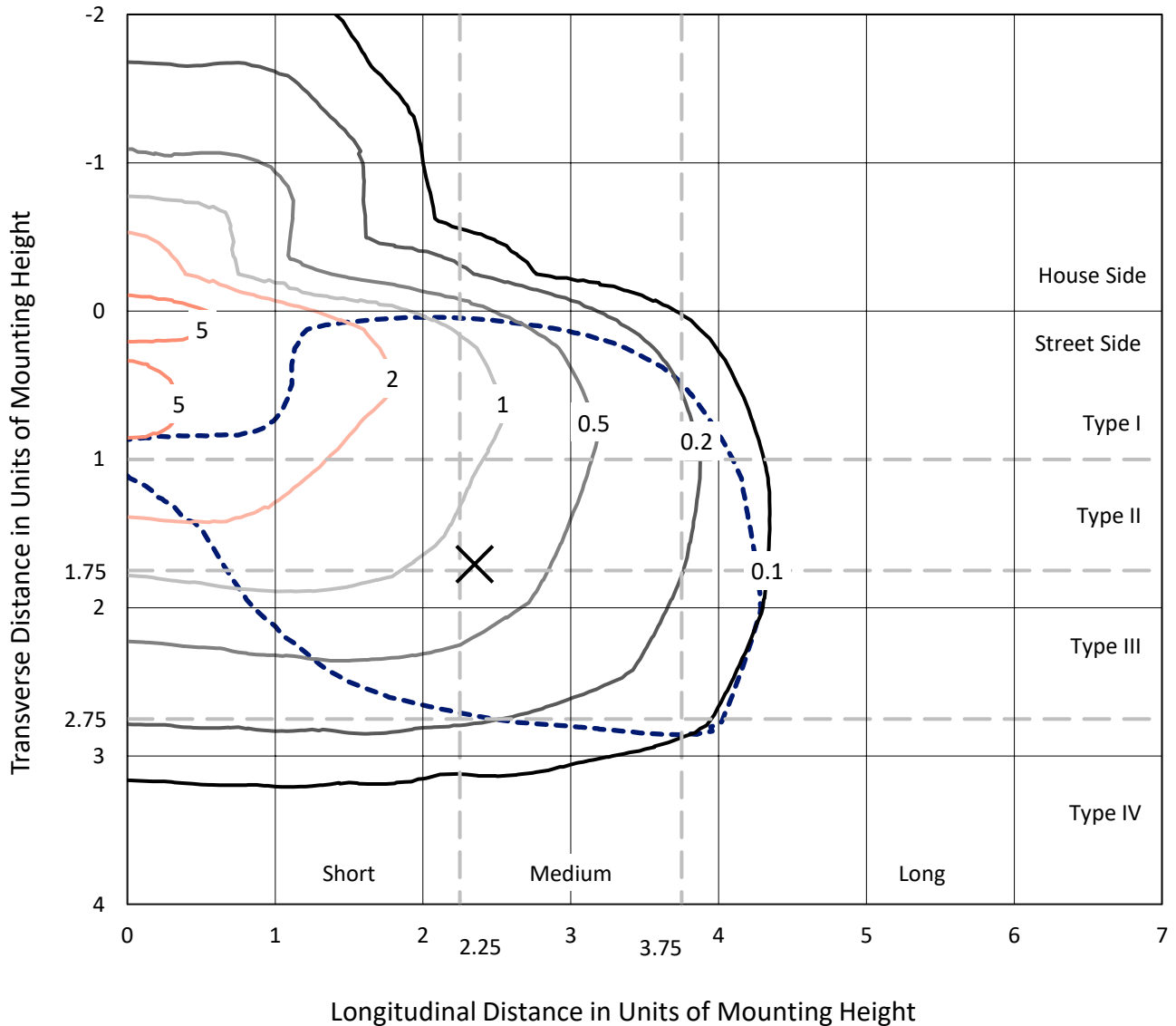
Input Watts (W): 164
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

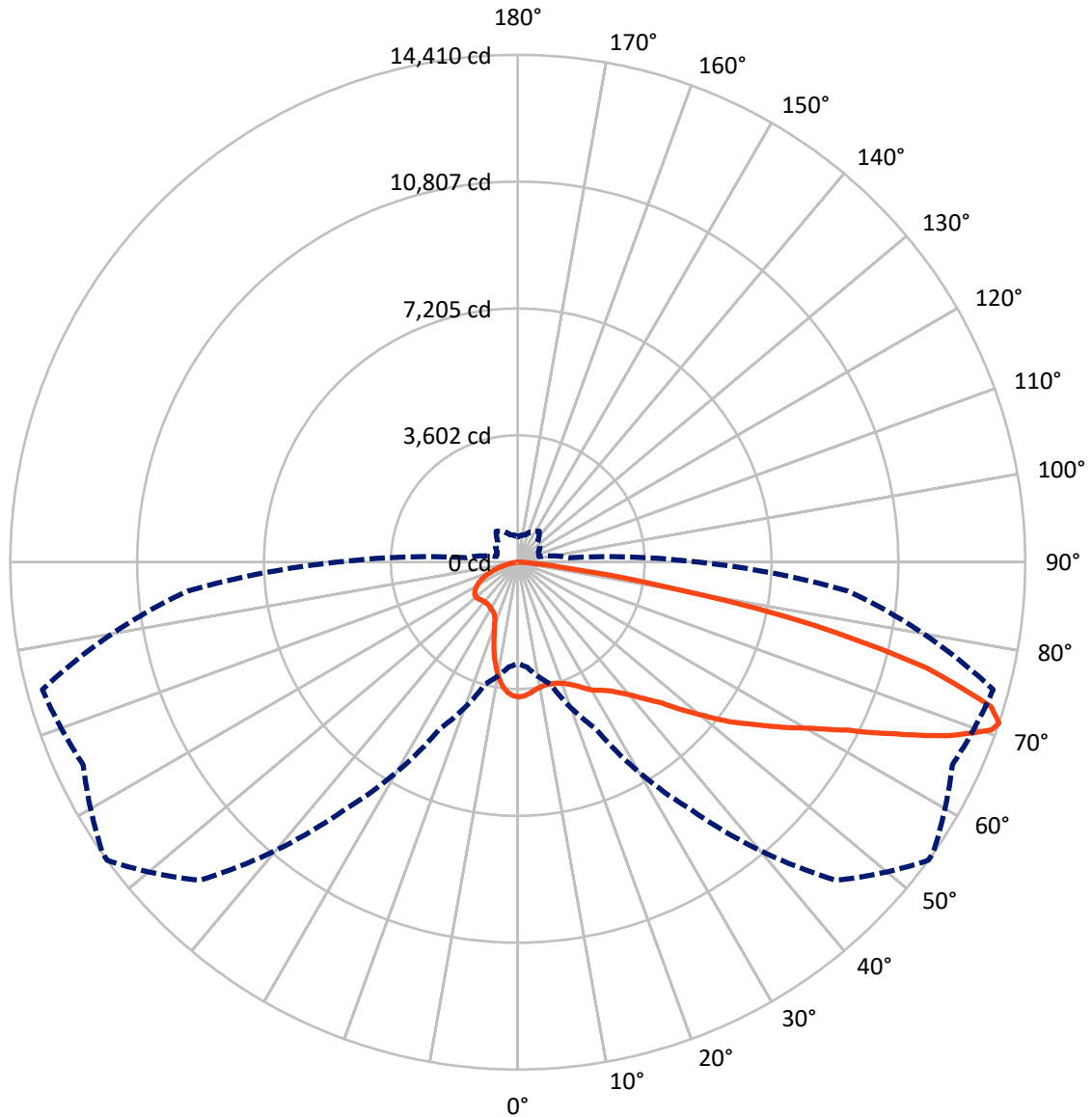
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3874.1	0.0	3874.1
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	17583.9	0.0	17583.9
	% Fixture	81.9	0.0	81.9
Total	Lumens	21458.0	0.0	21458.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	341.2	1.6
10°-20°	900.9	4.2
20°-30°	1500.0	7.0
30°-40°	2218.0	10.3
40°-50°	3124.1	14.6
50°-60°	4183.3	19.5
60°-70°	5272.7	24.6
70°-80°	3601.2	16.8
80°-90°	316.7	1.5
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°	21458.0	100.0
0°-180°	21458.0	100.0



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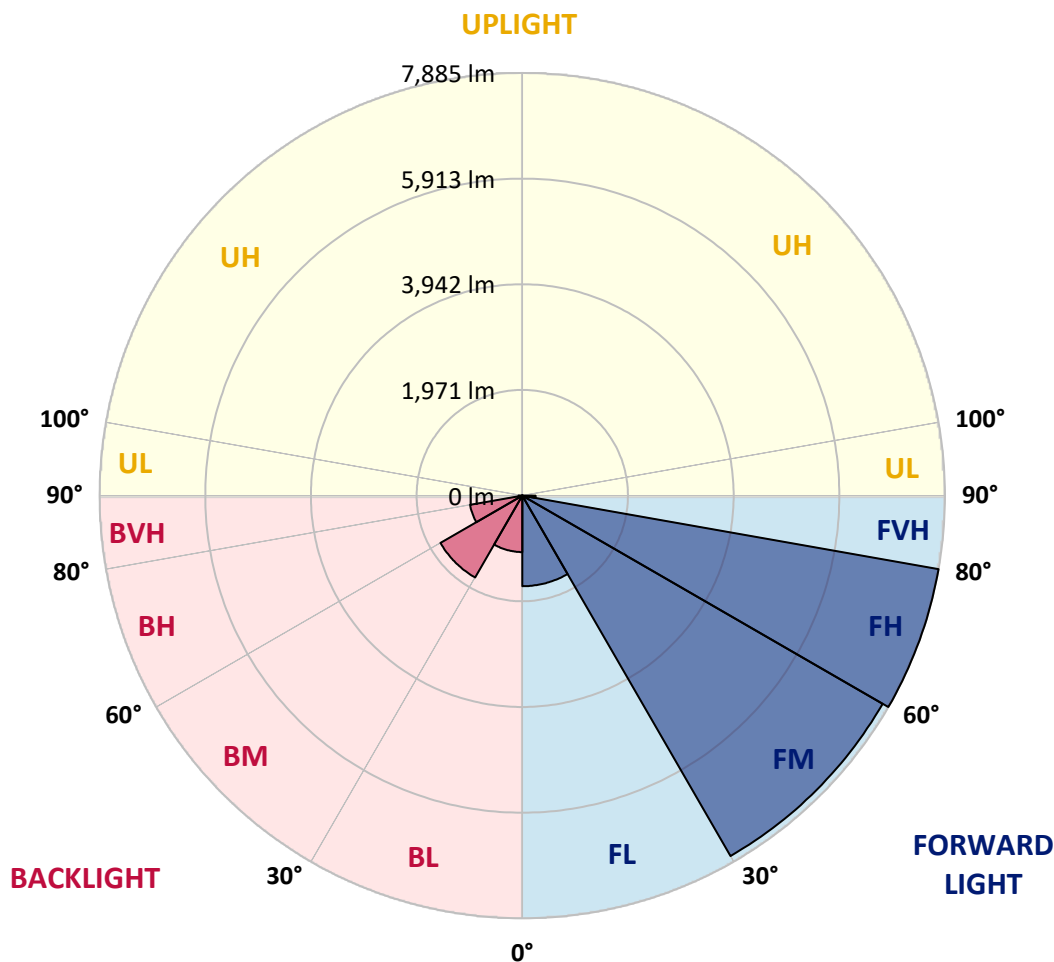
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1689.1	7.9			
FM	(30°-60°)	7762.7	36.2			
FH	(60°-80°)	7884.5	36.7			G4/12000
FVH	(80°-90°)	247.6	1.2			G3/500
BL	(0°-30°)	1052.9	4.9	B3/2500		
BM	(30°-60°)	1762.6	8.2	B2/2500		
BH	(60°-80°)	989.4	4.6	B2/1000		G2/1000
BVH	(80°-90°)	69.1	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	3828.4	3828.4	3828.4	3828.4	3828.4	3828.4	3828.4	3828.4	3828.4	3828.4	3828.4
2.5°	3698.6	3716.0	3720.6	3732.2	3756.6	3776.3	3796.0	3793.7	3821.5	3833.1	3843.5
5°	3534.0	3538.7	3556.0	3579.2	3622.1	3676.6	3729.9	3731.1	3799.4	3853.9	3880.6
7.5°	3413.5	3428.5	3440.1	3464.5	3509.7	3568.8	3653.4	3660.4	3782.1	3889.9	3946.7
10°	3334.7	3352.0	3364.8	3394.9	3440.1	3506.2	3597.8	3610.5	3769.3	3946.7	4046.3
12.5°	3262.8	3280.2	3291.8	3331.2	3390.3	3471.4	3574.6	3589.7	3773.9	4012.7	4155.3
15°	3306.8	3320.8	3316.1	3327.7	3367.1	3459.8	3583.9	3598.9	3791.3	4076.5	4263.1
17.5°	3502.7	3514.3	3476.1	3432.0	3413.5	3481.9	3612.8	3629.1	3826.1	4142.5	4373.2
20°	3791.3	3822.6	3739.2	3640.7	3551.4	3560.7	3673.1	3690.5	3874.8	4208.6	4485.6
22.5°	4166.9	4190.1	4088.1	3925.8	3761.2	3676.6	3763.5	3773.9	3947.8	4294.4	4608.5
25°	4608.5	4622.4	4481.0	4272.4	4034.7	3874.8	3887.5	3906.1	4068.4	4391.7	4717.4
27.5°	5037.3	5081.4	4918.0	4663.0	4350.0	4083.4	4057.9	4069.5	4199.3	4446.2	4792.8
30°	5546.2	5542.7	5370.0	5074.4	4673.4	4310.6	4219.0	4216.7	4270.0	4472.9	4847.3
32.5°	5951.9	5999.4	5830.1	5507.9	5043.1	4545.9	4330.3	4325.7	4324.5	4519.2	4928.4
35°	6413.2	6420.1	6264.8	5940.3	5443.0	4841.5	4485.6	4462.4	4435.8	4618.9	5038.5
37.5°	6825.8	6858.2	6715.7	6351.7	5835.9	5148.6	4698.9	4683.8	4602.7	4791.6	5214.7
40°	7148.0	7172.4	7086.6	6740.0	6223.1	5480.1	4970.1	4942.3	4843.8	5074.4	5450.0
42.5°	7253.5	7303.3	7336.9	7166.6	6668.2	5873.0	5303.9	5269.2	5193.8	5503.3	5721.2
45°	7261.6	7340.4	7517.8	7525.9	7115.6	6343.6	5693.4	5669.0	5663.2	6052.7	6102.5
47.5°	7200.2	7280.2	7578.0	7739.1	7514.3	6818.8	6255.5	6217.3	6220.8	6731.9	6530.2
50°	7051.8	7146.9	7508.5	7875.9	7826.1	7312.6	6849.0	6836.2	6908.1	7507.3	6974.2
52.5°	6772.5	6887.2	7436.6	7961.7	8057.9	7738.0	7523.6	7487.6	7669.6	8348.8	7459.8
55°	5999.4	6172.1	7173.5	8009.2	8278.1	8144.8	8130.9	8195.8	8436.9	9266.8	7994.1
57.5°	5596.0	5725.8	6602.1	8017.3	8556.3	8617.7	8840.3	8856.5	9278.4	10241.6	8598.0
60°	5375.8	5490.5	6289.1	7964.0	8944.6	9203.1	9565.8	9623.8	10100.2	11297.5	9223.9
62.5°	5183.4	5281.9	6101.4	7779.7	9382.7	10071.2	10505.9	10533.7	11033.2	12463.5	9841.7
65°	4730.2	4842.6	5723.5	7595.4	9760.6	11156.1	11753.0	11720.6	12026.6	13469.6	10228.8
67.5°	4119.4	4261.9	5017.6	6959.1	9947.2	12341.8	13157.8	13117.3	13007.1	14129.1	10340.1
70°	3339.3	3415.8	4114.7	5859.1	9201.9	12964.3	14267.1	14224.2	13614.5	14216.1	9813.9
71°	2873.3	2992.7	3582.7	5204.2	8581.8	12774.2	14409.6	14398.0	13615.7	13976.1	9417.5
72.5°	2242.8	2315.8	2837.4	4032.4	7294.1	11693.9	14057.3	14101.3	13320.1	13309.7	8600.3
75°	1418.7	1451.2	1780.3	2373.8	4002.3	8281.6	11999.9	12119.3	11827.2	10894.1	6395.8
77.5°	824.1	865.8	1066.3	1399.0	1729.3	4494.9	8586.4	8716.2	8217.8	5998.2	2618.4
80°	479.9	526.2	702.4	812.5	794.0	1667.9	4372.0	4593.4	3558.4	1514.9	734.9
82.5°	266.6	297.9	493.8	494.9	423.1	544.8	1375.8	1439.6	1015.3	610.8	300.2
85°	193.6	219.1	318.7	288.6	202.8	234.1	478.7	501.9	410.3	257.3	97.4
87.5°	68.4	97.4	175.0	139.1	55.6	48.7	137.9	112.4	104.3	71.9	22.0
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°	3828.4	3828.4	3828.4	3828.4	3828.4	3828.4	3828.4	3828.4	3828.4	3828.4	3828.4
2.5°	3849.3	3851.6	3840.0	3819.2	3798.3	3771.6	3741.5	3718.3	3707.9	3706.7	3705.6
5°	3891.0	3896.8	3852.8	3787.9	3716.0	3627.9	3552.6	3466.8	3444.8	3410.0	3420.4
7.5°	3958.2	3954.8	3867.8	3729.9	3561.8	3375.2	3217.6	3126.0	3031.0	3004.3	3005.5
10°	4054.4	4032.4	3867.8	3611.7	3331.2	3054.2	2833.9	2694.8	2619.5	2556.9	2533.7
12.5°	4156.4	4100.8	3830.7	3445.9	3034.5	2694.8	2458.4	2270.6	2221.9	2170.9	2172.1
15°	4253.8	4161.1	3757.7	3213.0	2714.6	2311.2	2081.7	1969.3	1954.2	1960.0	1958.8
17.5°	4341.9	4204.0	3646.5	2953.3	2341.3	1982.0	1860.3	1868.4	1909.0	1938.0	1941.5
20°	4431.1	4229.5	3480.7	2605.6	1989.0	1782.7	1787.3	1851.0	1912.5	1951.9	1957.7
22.5°	4515.8	4241.1	3286.0	2269.5	1734.0	1698.0	1766.4	1834.8	1895.1	1933.3	1939.1
25°	4571.4	4214.4	3010.1	1918.3	1608.8	1667.9	1739.8	1797.7	1848.7	1888.1	1897.4
27.5°	4586.5	4128.6	2668.2	1634.3	1550.8	1638.9	1705.0	1747.9	1787.3	1824.4	1831.3
30°	4578.3	4002.3	2292.7	1467.4	1517.2	1605.3	1656.3	1687.6	1735.1	1764.1	1769.9
32.5°	4565.6	3855.1	1900.9	1378.1	1489.4	1574.0	1604.2	1632.0	1630.8	1619.2	1627.3
35°	4570.2	3678.9	1583.3	1324.8	1465.1	1550.8	1576.3	1541.6	1441.9	1437.3	1432.6
37.5°	4594.6	3505.0	1352.6	1287.7	1452.3	1547.4	1561.3	1401.3	1313.2	1272.7	1262.2
40°	4657.2	3302.2	1200.8	1259.9	1451.2	1574.0	1492.9	1330.6	1161.4	1082.6	1076.8
42.5°	4740.6	3102.8	1108.1	1242.5	1465.1	1614.6	1465.1	1230.9	1046.6	1000.3	993.3
45°	4864.6	2874.5	1057.1	1234.4	1485.9	1629.7	1455.8	1157.9	1000.3	963.2	963.2
47.5°	5004.9	2656.6	1029.3	1228.6	1512.6	1619.2	1373.5	1134.7	978.3	982.9	1004.9
50°	5144.0	2467.7	1008.4	1215.9	1535.8	1613.4	1339.9	1133.6	984.1	1043.2	1082.6
52.5°	5305.1	2334.4	982.9	1195.0	1535.8	1576.3	1329.5	1156.8	1000.3	1017.7	1035.1
55°	5499.8	2292.7	950.4	1149.8	1508.0	1483.6	1323.7	1190.4	1011.9	971.3	978.3
57.5°	5757.1	2359.9	919.1	1093.0	1444.2	1387.4	1321.3	1199.6	985.2	951.6	944.6
60°	6056.2	2493.2	909.9	1035.1	1357.3	1305.1	1307.4	1173.0	948.1	913.4	919.1
62.5°	6266.0	2573.1	904.1	991.0	1262.2	1214.7	1273.8	1140.5	931.9	901.8	907.6
65°	6266.0	2475.8	850.8	923.8	1139.4	1105.8	1233.3	1100.0	911.0	876.3	870.5
67.5°	6028.3	2191.8	769.6	822.9	1003.8	981.7	1176.5	1051.3	879.7	853.1	839.2
70°	5409.4	1662.1	667.6	704.7	832.2	851.9	1103.4	985.2	827.6	795.1	774.3
71°	5137.0	1447.7	624.7	644.4	766.1	795.1	1068.7	957.4	804.4	758.0	720.9
72.5°	4612.0	1219.3	559.8	567.9	654.9	707.0	995.6	904.1	760.4	694.3	652.6
75°	3503.9	890.2	450.9	446.2	484.5	561.0	842.6	805.6	666.5	577.2	552.9
77.5°	1513.8	484.5	337.3	340.8	329.2	425.4	663.0	692.0	571.4	469.4	447.4
80°	459.0	279.3	230.7	235.3	220.2	285.1	467.1	542.4	459.0	365.1	335.0
82.5°	235.3	166.9	157.6	155.3	140.2	161.1	282.8	370.9	328.0	228.3	201.7
85°	102.0	89.2	77.7	75.3	66.1	58.0	100.8	185.5	173.9	127.5	121.7
87.5°	25.5	23.2	15.1	13.9	8.1	1.2	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)