

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: P454765

Luminaire Tested: **GALN-SA5D-827-U-T3**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454765
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5D-827-U-T3
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28242 lumens
Efficiency: N/A
Efficacy: 91.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

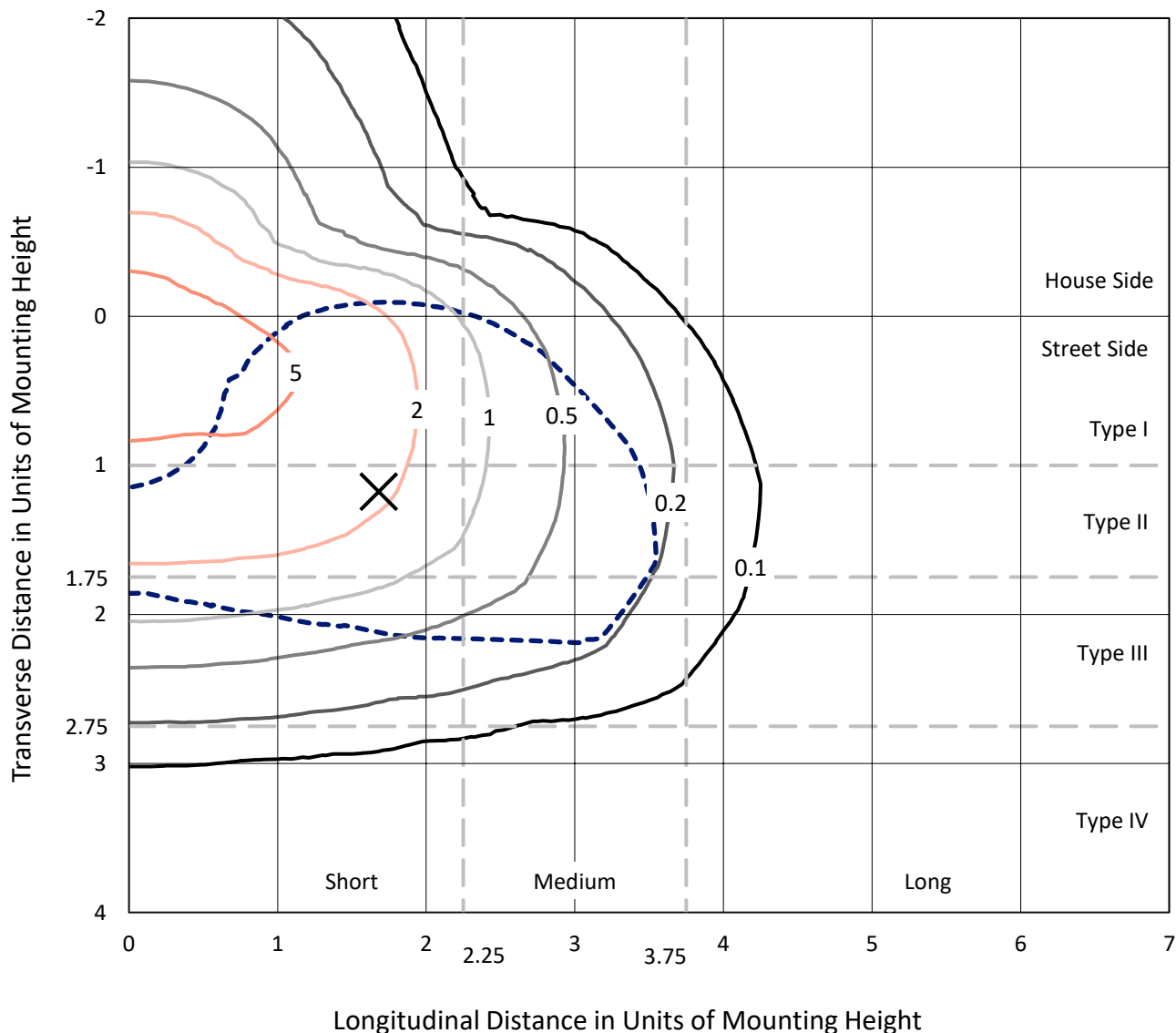
Input Watts (W): 309
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

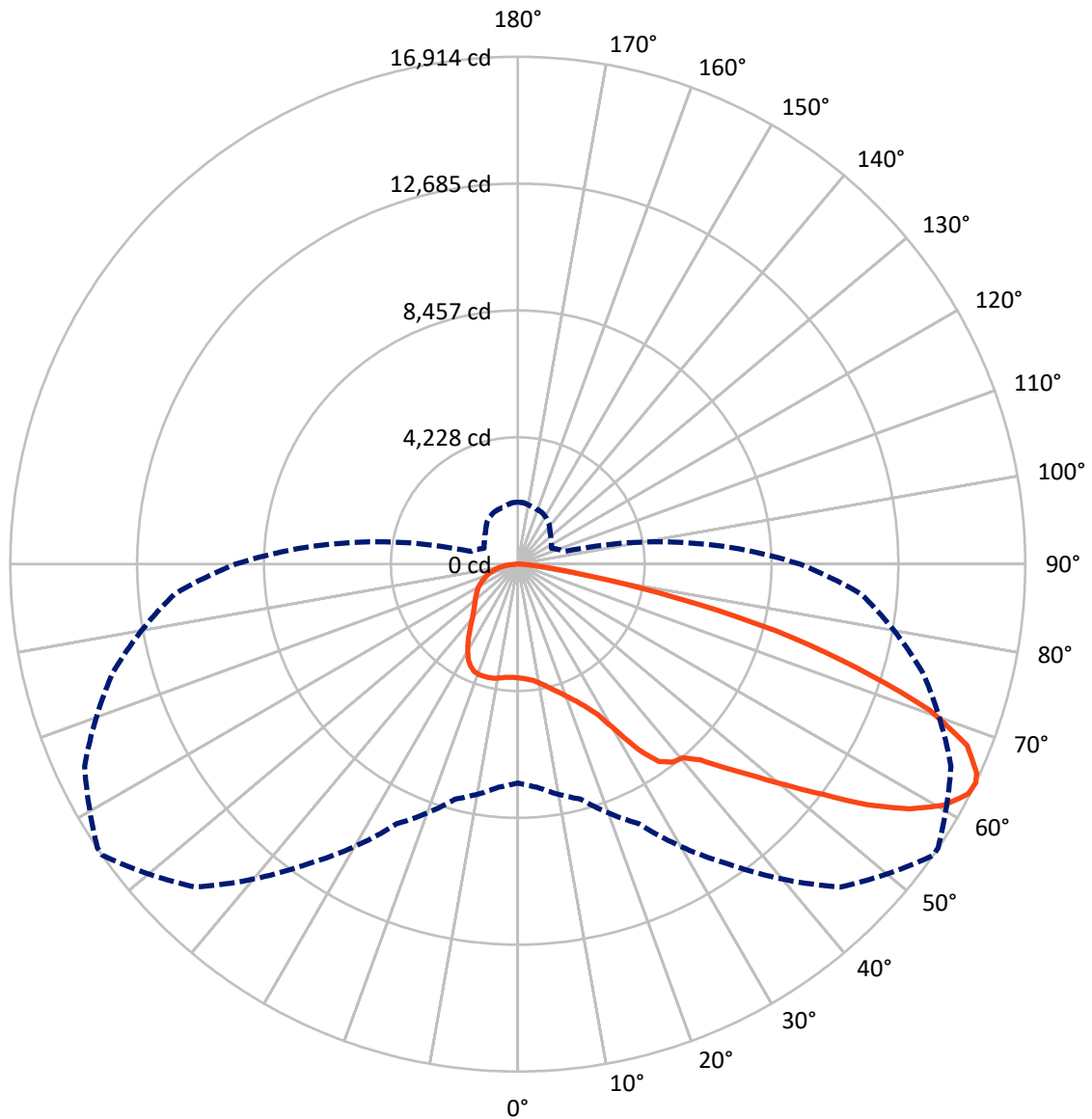
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 64-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6860.5	0.0	6860.5
	% Fixture	24.3	0.0	24.3
Street Side	Lumens	21381.5	0.0	21381.5
	% Fixture	75.7	0.0	75.7
Total	Lumens	28242.0	0.0	28242.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	368.6	1.3
10°-20°	1163.0	4.1
20°-30°	2070.5	7.3
30°-40°	3185.6	11.3
40°-50°	4515.9	16.0
50°-60°	6536.7	23.1
60°-70°	6764.8	24.0
70°-80°	3168.0	11.2
80°-90°	469.0	1.7
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°	28242.0	100.0
0°-180°	28242.0	100.0

Coefficient of Utilization



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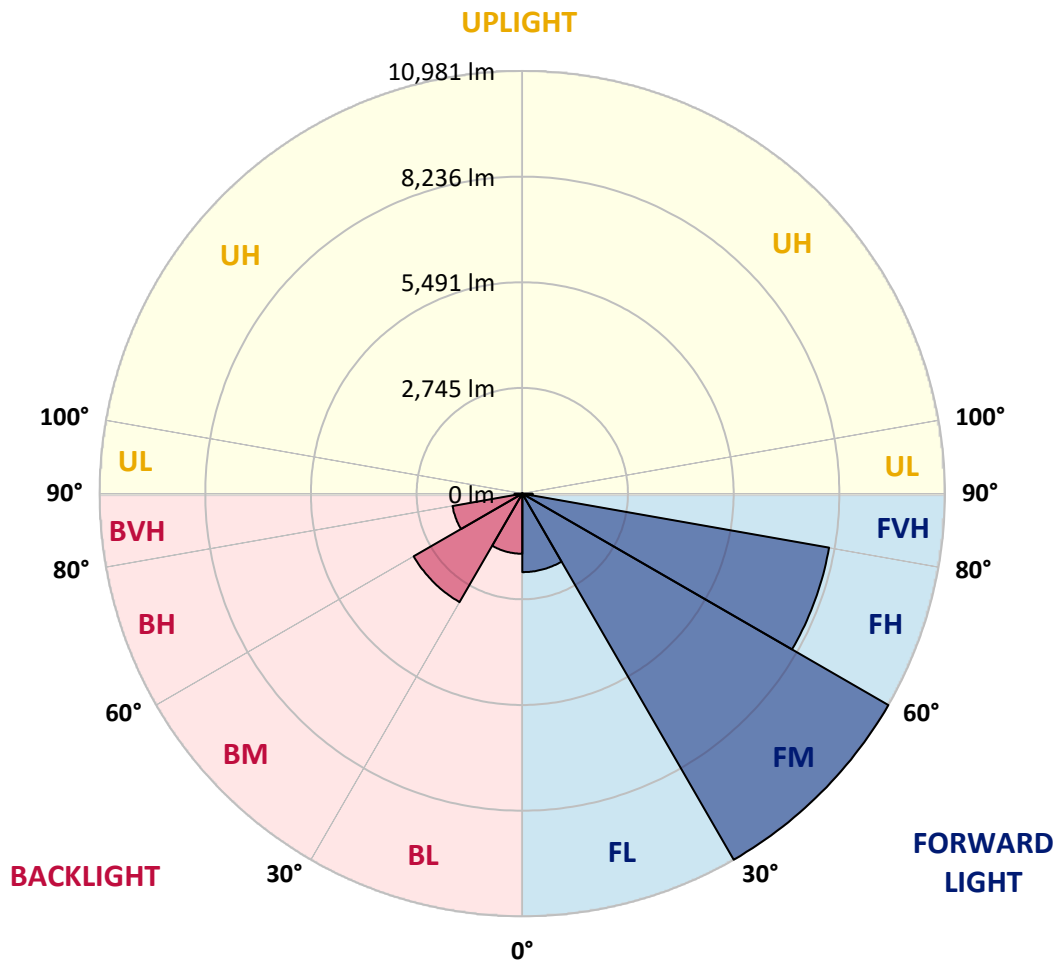
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2039.5	7.2			
FM	(30°-60°)	10981.3	38.9			
FH	(60°-80°)	8092.2	28.7			G4/12000
FVH	(80°-90°)	268.5	1.0			G3/500
BL	(0°-30°)	1562.6	5.5	B3/2500		
BM	(30°-60°)	3257.0	11.5	B3/5000		
BH	(60°-80°)	1840.6	6.5	B3/2500		G3/2500
BVH	(80°-90°)	200.5	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	3789.2	3789.2	3789.2	3789.2	3789.2	3789.2	3789.2	3789.2	3789.2	3789.2	3789.2
2.5°	3831.7	3830.2	3834.9	3830.2	3833.3	3822.3	3817.6	3820.7	3816.0	3808.1	3793.9
5°	3879.0	3877.4	3879.0	3872.7	3875.8	3869.5	3858.5	3861.6	3853.8	3836.5	3816.0
7.5°	3959.2	3952.9	3952.9	3951.4	3945.1	3935.6	3927.8	3924.6	3916.7	3894.7	3863.2
10°	4063.1	4063.1	4064.7	4052.1	4060.0	4042.7	4034.8	4033.2	4006.5	3978.1	3934.1
12.5°	4200.1	4208.0	4203.3	4197.0	4193.8	4187.5	4160.7	4167.0	4137.1	4088.3	4034.8
15°	4370.1	4382.7	4374.8	4371.7	4363.8	4340.2	4329.2	4324.5	4285.1	4214.3	4143.4
17.5°	4595.2	4579.5	4573.2	4565.3	4532.3	4515.0	4496.1	4492.9	4458.3	4374.8	4264.6
20°	4792.0	4814.1	4801.5	4793.6	4760.5	4727.5	4713.3	4708.6	4678.7	4587.4	4411.1
22.5°	5026.6	5031.3	5036.0	5017.1	5001.4	4976.2	4951.0	4943.2	4932.1	4837.7	4622.0
25°	5276.9	5295.8	5280.0	5261.1	5242.3	5240.7	5264.3	5261.1	5256.4	5165.1	4902.2
27.5°	5684.6	5701.9	5706.7	5686.2	5613.8	5620.1	5673.6	5690.9	5763.3	5612.2	5262.7
30°	5914.5	5931.8	5971.1	6048.3	6163.2	6263.9	6393.0	6432.4	6501.7	6216.7	5690.9
32.5°	6056.1	6062.4	6133.3	6276.5	6621.3	6997.5	7348.6	7362.8	7406.9	7007.0	6082.9
35°	6279.7	6284.4	6341.1	6498.5	6903.1	7529.6	8072.8	8090.1	8053.9	7252.6	6265.5
37.5°	6555.2	6567.8	6604.0	6734.6	7217.9	7975.2	8373.4	8360.9	8039.7	7447.8	6588.2
40°	6956.6	6956.6	6914.1	7090.4	7550.1	8230.2	8478.9	8456.9	8371.9	8012.9	7079.4
42.5°	7310.8	7304.5	7405.3	7524.9	7965.7	8623.8	8921.3	8957.5	9097.6	8722.9	7638.3
45°	7772.1	7800.4	7857.1	8074.3	8672.6	9296.0	9680.1	9714.7	9913.1	9558.9	8291.6
47.5°	8238.1	8247.5	8425.4	8715.1	9547.8	10207.4	10522.3	10579.0	10760.0	10536.5	8995.3
50°	8568.7	8658.4	8943.3	9399.9	10449.9	11318.9	11564.5	11632.1	11951.7	11600.7	9815.5
52.5°	8918.1	9006.3	9354.2	10050.0	11485.7	12455.5	12757.7	12803.4	13135.6	12677.4	10654.5
55°	9217.2	9299.1	9694.2	10626.2	12310.6	13615.7	14163.5	14110.0	14269.0	13507.1	11301.6
57.5°	9266.0	9332.2	9829.6	10994.6	12930.9	14610.6	15396.2	15427.7	15243.5	14127.3	11835.2
60°	8888.2	9023.6	9595.1	10955.2	13209.5	15303.3	16315.5	16337.6	15814.9	14445.3	12047.7
62.5°	8219.2	8205.0	8896.1	10322.4	12819.1	15460.7	16857.1	16833.5	16038.5	14292.6	11841.5
64°	7295.1	7465.1	8110.5	9544.7	12189.4	15218.3	16913.8	16901.2	15931.4	13974.6	11490.5
65°	6731.5	6722.1	7359.6	8908.7	11562.9	14853.1	16813.0	16795.7	15707.9	13689.7	11218.1
67.5°	4859.7	4881.8	5511.5	6874.8	9399.9	13425.2	16156.5	16092.0	14826.3	12745.1	10182.3
70°	2943.9	2956.4	3450.8	4560.6	6747.2	10852.9	14563.4	14566.6	13477.2	11334.6	8666.3
72.5°	1550.6	1583.7	1782.1	2589.6	4097.8	7614.7	11814.8	12095.0	11570.8	9673.8	6846.4
75°	862.7	867.4	1007.5	1276.7	2090.6	4261.5	8880.4	8960.6	9160.6	7786.2	5062.8
77.5°	658.0	667.5	711.6	824.9	1138.2	1975.7	5374.5	5777.5	6456.0	5489.4	2888.8
80°	533.7	543.1	580.9	648.6	757.2	936.7	2496.8	2714.0	3455.5	2436.9	1127.2
82.5°	415.6	409.3	458.1	502.2	551.0	554.1	1024.8	1133.5	1407.4	1048.5	488.0
85°	308.6	308.6	347.9	338.5	355.8	324.3	451.8	499.0	563.6	445.5	226.7
87.5°	122.8	135.4	228.3	204.7	159.0	127.5	166.9	176.3	195.2	174.7	94.5
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°	3789.2	3789.2	3789.2	3789.2	3789.2	3789.2	3789.2	3789.2	3789.2	3789.2	3789.2
2.5°	3795.5	3800.2	3789.2	3781.4	3778.2	3773.5	3768.8	3770.3	3776.6	3782.9	3781.4
5°	3814.4	3816.0	3797.1	3787.6	3781.4	3775.1	3775.1	3779.8	3792.4	3801.8	3801.8
7.5°	3861.6	3861.6	3834.9	3817.6	3808.1	3797.1	3793.9	3795.5	3805.0	3817.6	3819.1
10°	3935.6	3929.3	3894.7	3867.9	3850.6	3823.9	3800.2	3787.6	3792.4	3800.2	3800.2
12.5°	4025.4	4008.0	3964.0	3927.8	3885.3	3834.9	3786.1	3760.9	3759.3	3767.2	3764.0
15°	4121.4	4102.5	4041.1	3975.0	3901.0	3827.0	3768.8	3732.6	3704.2	3696.3	3713.7
17.5°	4233.2	4193.8	4108.8	4017.5	3907.3	3811.3	3720.0	3646.0	3595.6	3581.4	3586.1
20°	4368.5	4316.6	4201.7	4058.4	3902.6	3754.6	3612.9	3513.7	3431.9	3406.7	3409.8
22.5°	4555.9	4466.2	4297.7	4078.9	3863.2	3647.5	3450.8	3321.7	3222.5	3183.1	3206.8
25°	4768.4	4670.8	4389.0	4074.2	3760.9	3475.9	3258.7	3090.3	3000.5	2942.3	2954.9
27.5°	5061.2	4888.1	4486.6	4031.7	3614.5	3266.6	3014.7	2855.7	2773.8	2743.9	2758.1
30°	5435.9	5169.8	4592.1	3916.7	3383.1	3002.1	2769.1	2665.2	2616.4	2578.6	2591.2
32.5°	5706.7	5368.2	4615.7	3723.1	3132.8	2761.2	2602.2	2525.1	2471.6	2435.4	2443.2
35°	5900.3	5536.6	4604.7	3485.4	2871.4	2562.9	2470.0	2407.0	2320.4	2241.7	2227.6
37.5°	6160.0	5747.6	4524.4	3225.6	2613.3	2429.1	2363.0	2246.5	2122.1	2016.6	2011.9
40°	6558.3	5994.8	4352.8	2920.2	2392.9	2329.9	2249.6	2098.5	1964.7	1879.7	1873.4
42.5°	6969.2	6223.0	4119.8	2599.1	2211.8	2226.0	2128.4	1978.8	1897.0	1841.9	1835.6
45°	7471.4	6470.2	3867.9	2320.4	2078.0	2128.4	2022.9	1936.3	1887.5	1851.3	1841.9
47.5°	8014.5	6723.6	3584.6	2070.1	1964.7	2038.7	1978.8	1939.5	1912.7	1887.5	1876.5
50°	8600.1	7007.0	3318.5	1868.6	1862.3	1945.8	1974.1	1959.9	1944.2	1936.3	1926.9
52.5°	9242.4	7296.7	3095.0	1727.0	1772.6	1879.7	1975.7	1986.7	1986.7	1982.0	1975.7
55°	9676.9	7498.2	2868.3	1612.0	1681.3	1826.1	1972.5	2015.0	2030.8	2024.5	2018.2
57.5°	9998.1	7608.4	2583.3	1512.9	1604.2	1774.2	1955.2	2018.2	2033.9	2041.8	2038.7
60°	10064.2	7506.0	2210.2	1409.0	1520.7	1698.6	1892.3	1971.0	1991.4	2040.2	2045.0
62.5°	9766.7	7191.2	1838.7	1306.6	1418.4	1583.7	1807.2	1917.4	1958.4	2033.9	2041.8
64°	9401.4	6838.5	1632.5	1242.1	1352.3	1519.2	1764.7	1903.3	1956.8	2057.5	2063.8
65°	9133.8	6581.9	1503.4	1201.2	1309.8	1476.6	1741.1	1908.0	1971.0	2093.8	2103.2
67.5°	8148.3	5698.8	1243.7	1105.1	1209.0	1404.2	1745.8	1947.3	1967.8	2107.9	2106.3
70°	6742.5	4537.0	1042.2	1017.0	1111.4	1346.0	1727.0	1884.4	1886.0	1978.8	1956.8
72.5°	5048.6	3353.2	903.6	925.7	1002.8	1207.5	1630.9	1799.4	1772.6	1785.2	1763.2
75°	3468.1	2218.1	777.7	828.1	889.5	1067.3	1495.5	1634.1	1591.6	1575.8	1560.1
77.5°	1851.3	1226.3	647.0	732.0	773.0	922.5	1305.1	1438.9	1394.8	1333.4	1312.9
80°	749.3	577.8	521.1	606.1	629.7	743.0	1086.2	1169.7	1136.6	1029.6	994.9
82.5°	376.2	346.3	409.3	477.0	478.6	530.5	807.6	886.3	812.3	681.7	651.7
85°	196.8	203.1	281.8	335.3	296.0	286.5	484.9	536.8	492.7	428.2	385.7
87.5°	70.8	81.9	148.0	146.4	103.9	55.1	107.0	52.0	28.3	17.3	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

(END OF REPORT)