

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: P456855

Luminaire Tested: **GALN-SA8A-827-U-T3R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P456855
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-SA8A-827-U-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27780 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

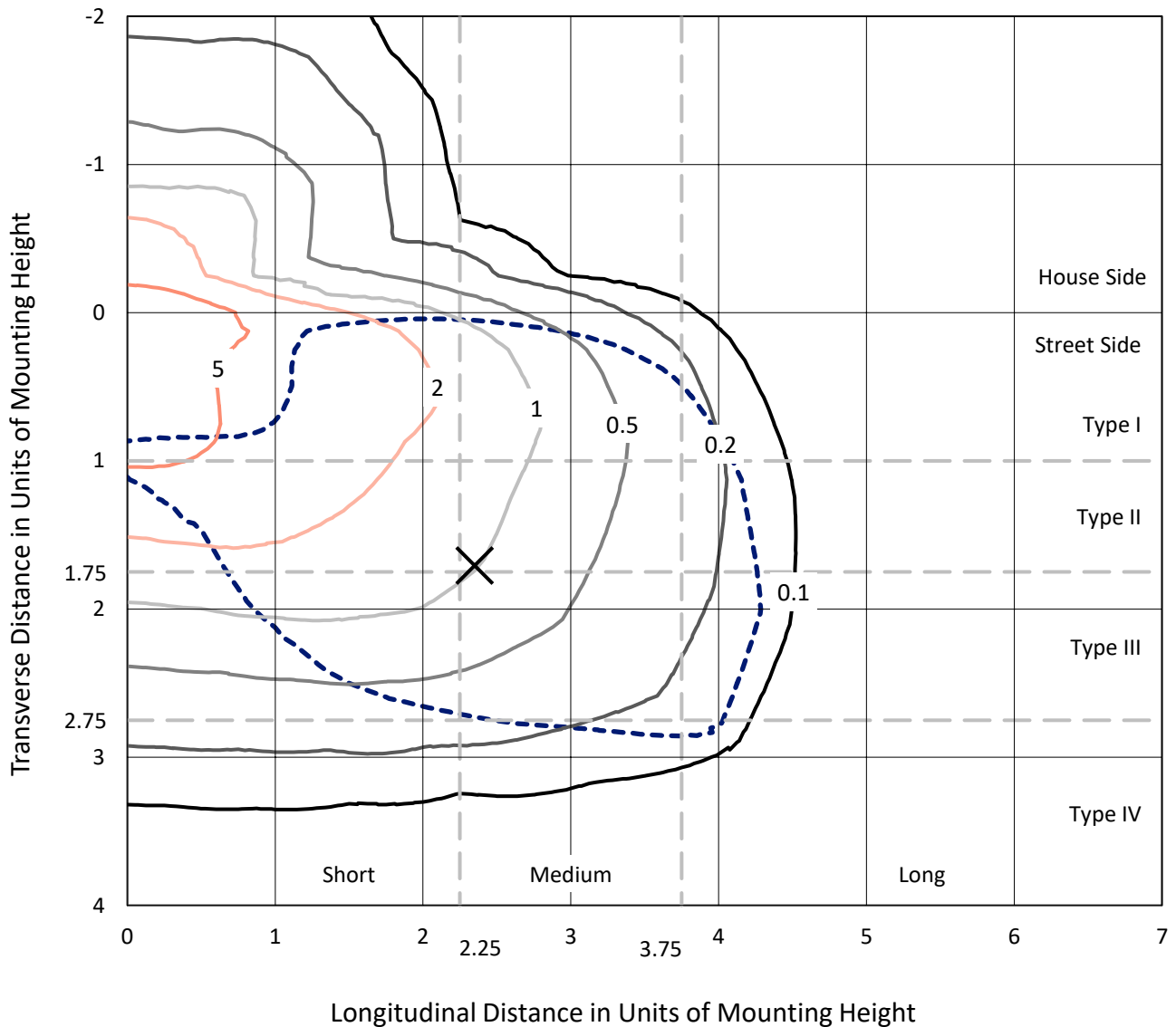
Input Watts (W): 244
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

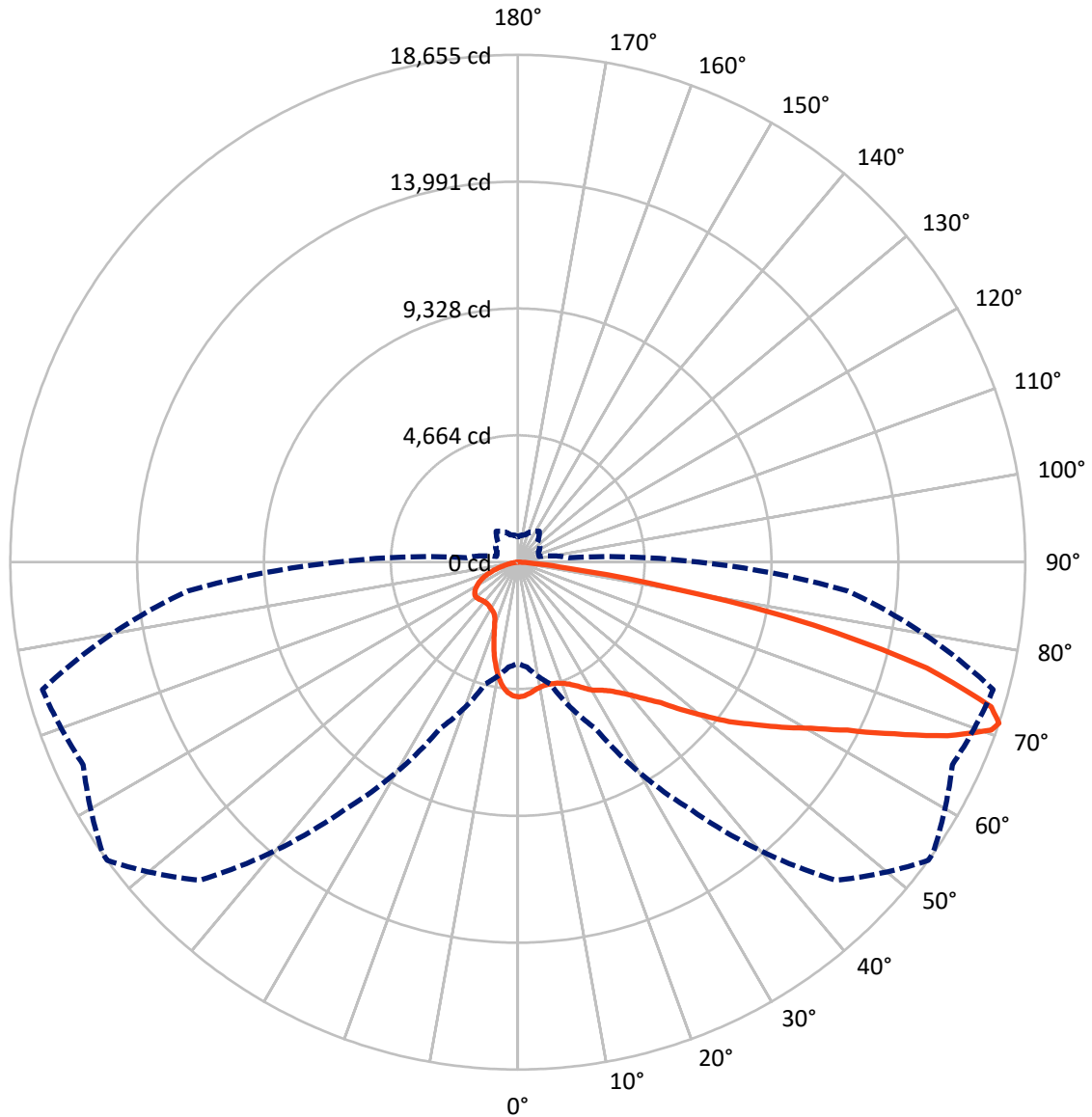
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8 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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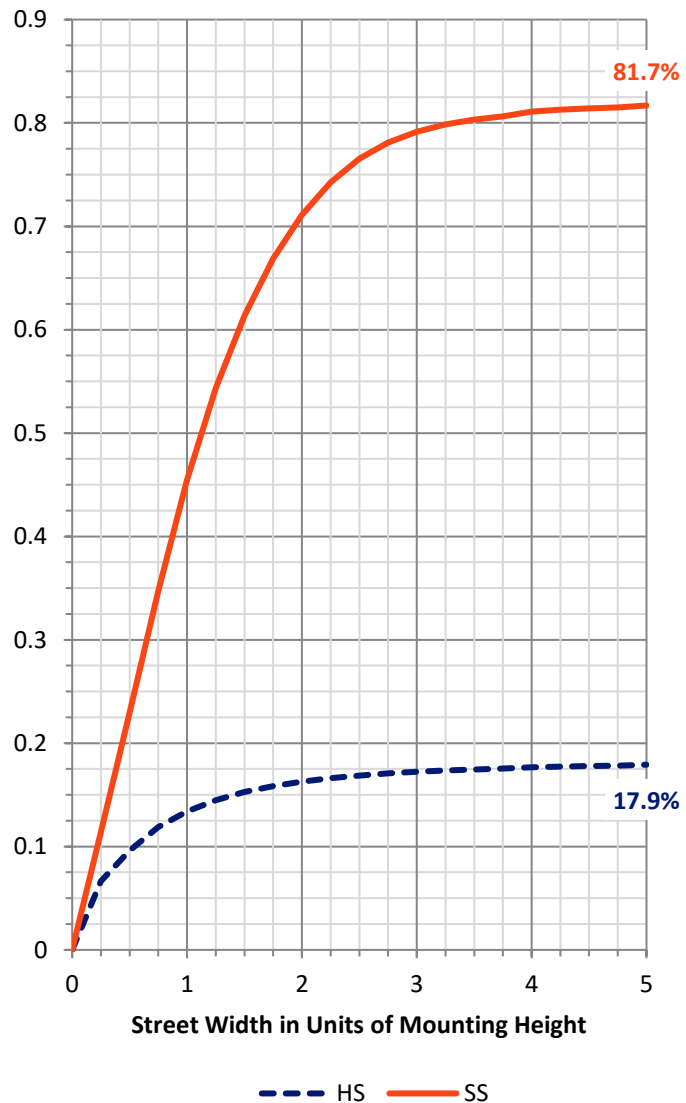
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5015.5	0.0	5015.5
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	22764.5	0.0	22764.5
	% Fixture	81.9	0.0	81.9
Total	Lumens	27780.0	0.0	27780.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	441.7	1.6
10°-20°	1166.3	4.2
20°-30°	1941.9	7.0
30°-40°	2871.4	10.3
40°-50°	4044.5	14.6
50°-60°	5415.8	19.5
60°-70°	6826.2	24.6
70°-80°	4662.2	16.8
80°-90°	410.0	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°	27780.0	100.0
0°-180°	27780.0	100.0



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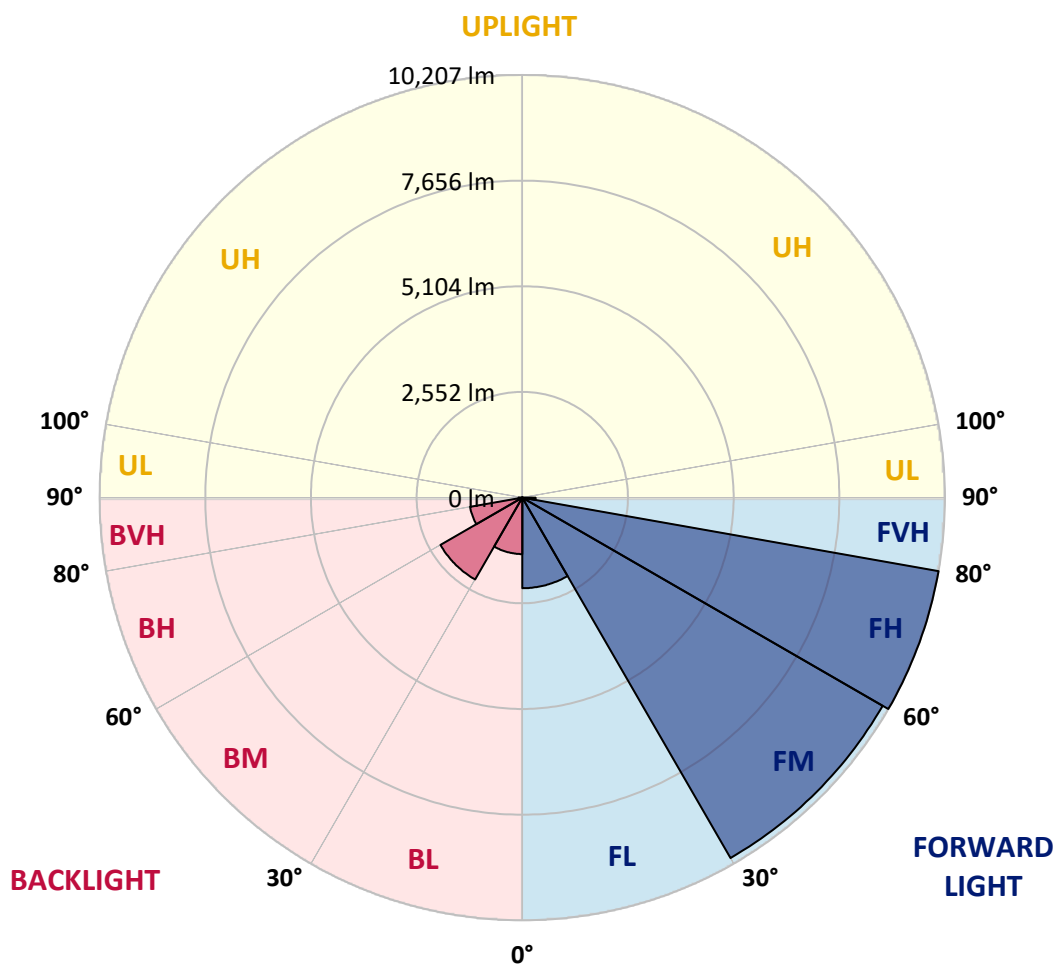
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2186.7	7.9			
FM	(30°-60°)	10049.8	36.2			
FH	(60°-80°)	10207.5	36.7			G4/12000
FVH	(80°-90°)	320.5	1.2			G3/500
BL	(0°-30°)	1363.1	4.9	B3/2500		
BM	(30°-60°)	2281.9	8.2	B2/2500		
BH	(60°-80°)	1280.9	4.6	B3/2500		G3/2500
BVH	(80°-90°)	89.5	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°	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4
2.5°	4788.3	4810.8	4816.8	4831.8	4863.3	4888.8	4914.3	4911.3	4947.4	4962.4	4975.9
5°	4575.2	4581.2	4603.7	4633.7	4689.3	4759.8	4828.8	4830.3	4918.8	4989.4	5023.9
7.5°	4419.2	4438.7	4453.7	4485.2	4543.7	4620.2	4729.8	4738.8	4896.3	5035.9	5109.4
10°	4317.1	4339.6	4356.1	4395.2	4453.7	4539.2	4657.8	4674.3	4879.8	5109.4	5238.5
12.5°	4224.1	4246.6	4261.6	4312.6	4389.2	4494.2	4627.7	4647.2	4885.8	5195.0	5379.5
15°	4281.1	4299.1	4293.1	4308.1	4359.1	4479.2	4639.7	4659.3	4908.3	5277.5	5519.1
17.5°	4534.7	4549.7	4500.2	4443.2	4419.2	4507.7	4677.3	4698.3	4953.4	5363.0	5661.6
20°	4908.3	4948.9	4840.8	4713.3	4597.7	4609.7	4755.3	4777.8	5016.4	5448.5	5807.2
22.5°	5394.5	5424.5	5292.5	5082.4	4869.3	4759.8	4872.3	4885.8	5110.9	5559.6	5966.2
25°	5966.2	5984.2	5801.2	5531.1	5223.5	5016.4	5032.9	5056.9	5267.0	5685.6	6107.3
27.5°	6521.5	6578.5	6366.9	6036.8	5631.6	5286.5	5253.5	5268.5	5436.5	5756.2	6204.8
30°	7180.2	7175.7	6952.1	6569.5	6050.3	5580.6	5462.1	5459.1	5528.1	5790.7	6275.4
32.5°	7705.4	7766.9	7547.8	7130.7	6529.0	5885.2	5606.1	5600.1	5598.6	5850.7	6380.4
35°	8302.6	8311.6	8110.5	7690.4	7046.6	6267.9	5807.2	5777.2	5742.7	5979.7	6523.0
37.5°	8836.8	8878.8	8694.3	8223.1	7555.3	6665.5	6083.3	6063.8	5958.7	6203.3	6751.0
40°	9254.0	9285.5	9174.4	8725.8	8056.5	7094.7	6434.4	6398.4	6270.9	6569.5	7055.7
42.5°	9390.5	9455.1	9498.6	9278.0	8632.7	7603.4	6866.6	6821.6	6724.0	7124.7	7406.8
45°	9401.0	9503.1	9732.7	9743.2	9212.0	8212.6	7370.8	7339.3	7331.8	7835.9	7900.5
47.5°	9321.5	9425.0	9810.7	10019.3	9728.2	8827.8	8098.5	8049.0	8053.5	8715.3	8454.2
50°	9129.4	9252.5	9720.7	10196.3	10131.8	9467.1	8866.8	8850.3	8943.4	9719.2	9028.9
52.5°	8767.8	8916.4	9627.6	10307.4	10431.9	10017.8	9740.2	9693.6	9929.2	10808.6	9657.6
55°	7766.9	7990.5	9287.0	10368.9	10717.0	10544.5	10526.5	10610.5	10922.6	11997.0	10349.4
57.5°	7244.7	7412.8	8547.2	10379.4	11077.2	11156.7	11444.8	11465.8	12012.0	13259.0	11131.2
60°	6959.6	7108.2	8142.1	10310.4	11579.9	11914.5	12384.2	12459.2	13075.9	14626.0	11941.5
62.5°	6710.5	6838.1	7899.0	10071.8	12147.1	13038.4	13601.1	13637.1	14283.9	16135.6	12741.3
65°	6123.8	6269.4	7409.8	9833.2	12636.3	14442.9	15215.7	15173.7	15569.9	17438.1	13242.5
67.5°	5333.0	5517.6	6495.9	9009.4	12877.8	15978.0	17034.4	16981.9	16839.3	18291.9	13386.5
70°	4323.1	4422.2	5327.0	7585.4	11913.0	16783.8	18470.4	18414.9	17625.6	18404.4	12705.3
71°	3719.9	3874.5	4638.2	6737.5	11110.2	16537.7	18655.0	18640.0	17627.1	18093.8	12192.1
72.5°	2903.6	2998.1	3673.4	5220.5	9443.1	15139.2	18198.8	18255.9	17244.5	17231.0	11134.2
75°	1836.7	1878.7	2304.9	3073.2	5181.4	10721.5	15535.3	15689.9	15311.8	14103.8	8280.1
77.5°	1066.9	1120.9	1380.5	1811.2	2238.8	5819.2	11116.2	11284.2	10639.0	7765.4	3389.8
80°	621.2	681.3	909.3	1051.9	1027.9	2159.3	5660.1	5946.7	4606.7	1961.2	951.4
82.5°	345.1	385.6	639.2	640.7	547.7	705.3	1781.2	1863.7	1314.5	790.8	388.6
85°	250.6	283.6	412.7	373.6	262.6	303.1	619.7	649.7	531.2	333.1	126.0
87.5°	88.5	126.0	226.6	180.1	72.0	63.0	178.6	145.6	135.1	93.0	28.5
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°	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4
2.5°	4983.4	4986.4	4971.4	4944.4	4917.3	4882.8	4843.8	4813.8	4800.3	4798.8	4797.3
5°	5037.4	5044.9	4987.9	4903.8	4810.8	4696.8	4599.2	4488.2	4459.7	4414.7	4428.2
7.5°	5124.4	5119.9	5007.4	4828.8	4611.2	4369.6	4165.6	4047.0	3924.0	3889.5	3891.0
10°	5249.0	5220.5	5007.4	4675.8	4312.6	3954.0	3668.9	3488.8	3391.3	3310.2	3280.2
12.5°	5381.0	5309.0	4959.4	4461.2	3928.5	3488.8	3182.7	2939.6	2876.6	2810.6	2812.1
15°	5507.1	5387.0	4864.8	4159.6	3514.3	2992.1	2695.0	2549.5	2530.0	2537.5	2536.0
17.5°	5621.1	5442.5	4720.8	3823.4	3031.1	2566.0	2408.4	2418.9	2471.4	2508.9	2513.4
20°	5736.7	5475.6	4506.2	3373.3	2575.0	2307.9	2313.9	2396.4	2475.9	2527.0	2534.5
22.5°	5846.2	5490.6	4254.1	2938.1	2244.8	2198.3	2286.9	2375.4	2453.4	2502.9	2510.4
25°	5918.2	5456.1	3897.0	2483.4	2082.8	2159.3	2252.3	2327.4	2393.4	2444.4	2456.4
27.5°	5937.7	5345.0	3454.3	2115.8	2007.8	2121.8	2207.3	2262.9	2313.9	2361.9	2370.9
30°	5927.2	5181.4	2968.1	1899.7	1964.2	2078.3	2144.3	2184.8	2246.3	2283.9	2291.4
32.5°	5910.7	4990.9	2460.9	1784.2	1928.2	2037.8	2076.8	2112.8	2111.3	2096.3	2106.8
35°	5916.7	4762.8	2049.8	1715.1	1896.7	2007.8	2040.8	1995.8	1866.7	1860.7	1854.7
37.5°	5948.2	4537.7	1751.2	1667.1	1880.2	2003.3	2021.3	1814.2	1700.1	1647.6	1634.1
40°	6029.3	4275.1	1554.6	1631.1	1878.7	2037.8	1932.7	1722.6	1503.6	1401.5	1394.0
42.5°	6137.3	4017.0	1434.5	1608.6	1896.7	2090.3	1896.7	1593.6	1355.0	1295.0	1286.0
45°	6297.9	3721.4	1368.5	1598.1	1923.7	2109.8	1884.7	1499.1	1295.0	1247.0	1247.0
47.5°	6479.4	3439.3	1332.5	1590.6	1958.2	2096.3	1778.2	1469.1	1266.5	1272.5	1301.0
50°	6659.5	3194.7	1305.5	1574.1	1988.2	2088.8	1734.7	1467.6	1274.0	1350.5	1401.5
52.5°	6868.1	3022.1	1272.5	1547.1	1988.2	2040.8	1721.1	1497.6	1295.0	1317.5	1340.0
55°	7120.2	2968.1	1230.5	1488.6	1952.2	1920.7	1713.6	1541.1	1310.0	1257.5	1266.5
57.5°	7453.3	3055.1	1189.9	1415.0	1869.7	1796.2	1710.6	1553.1	1275.5	1232.0	1223.0
60°	7840.4	3227.7	1177.9	1340.0	1757.2	1689.6	1692.6	1518.6	1227.5	1182.4	1189.9
62.5°	8112.0	3331.3	1170.4	1283.0	1634.1	1572.6	1649.1	1476.6	1206.5	1167.4	1174.9
65°	8112.0	3205.2	1101.4	1195.9	1475.1	1431.5	1596.6	1424.0	1179.4	1134.4	1126.9
67.5°	7804.4	2837.6	996.4	1065.4	1299.5	1271.0	1523.1	1361.0	1138.9	1104.4	1086.4
70°	7003.1	2151.8	864.3	912.3	1077.4	1102.9	1428.5	1275.5	1071.4	1029.4	1002.4
71°	6650.5	1874.2	808.8	834.3	991.9	1029.4	1383.5	1239.5	1041.4	981.4	933.4
72.5°	5970.7	1578.6	724.8	735.3	847.8	915.3	1289.0	1170.4	984.4	898.8	844.8
75°	4536.2	1152.4	583.7	577.7	627.2	726.3	1090.9	1042.9	862.8	747.3	715.8
77.5°	1959.7	627.2	436.7	441.2	426.2	550.7	858.3	895.8	739.8	607.7	579.2
80°	594.2	361.6	298.6	304.6	285.1	369.1	604.7	702.3	594.2	472.7	433.7
82.5°	304.6	216.1	204.1	201.1	181.6	208.6	366.1	480.2	424.7	295.6	261.1
85°	132.0	115.5	100.5	97.5	85.5	75.0	130.5	240.1	225.1	165.1	157.6
87.5°	33.0	30.0	19.5	18.0	10.5	1.5	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)