

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: P591363

Luminaire Tested: **CTN-CA8-330-730-U-T2-SSS-HM-EX180**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591363
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-6)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-330-730-U-T2-SSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE, 180D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (8) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26378 lumens
Efficiency: N/A
Efficacy: 79.6 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G3

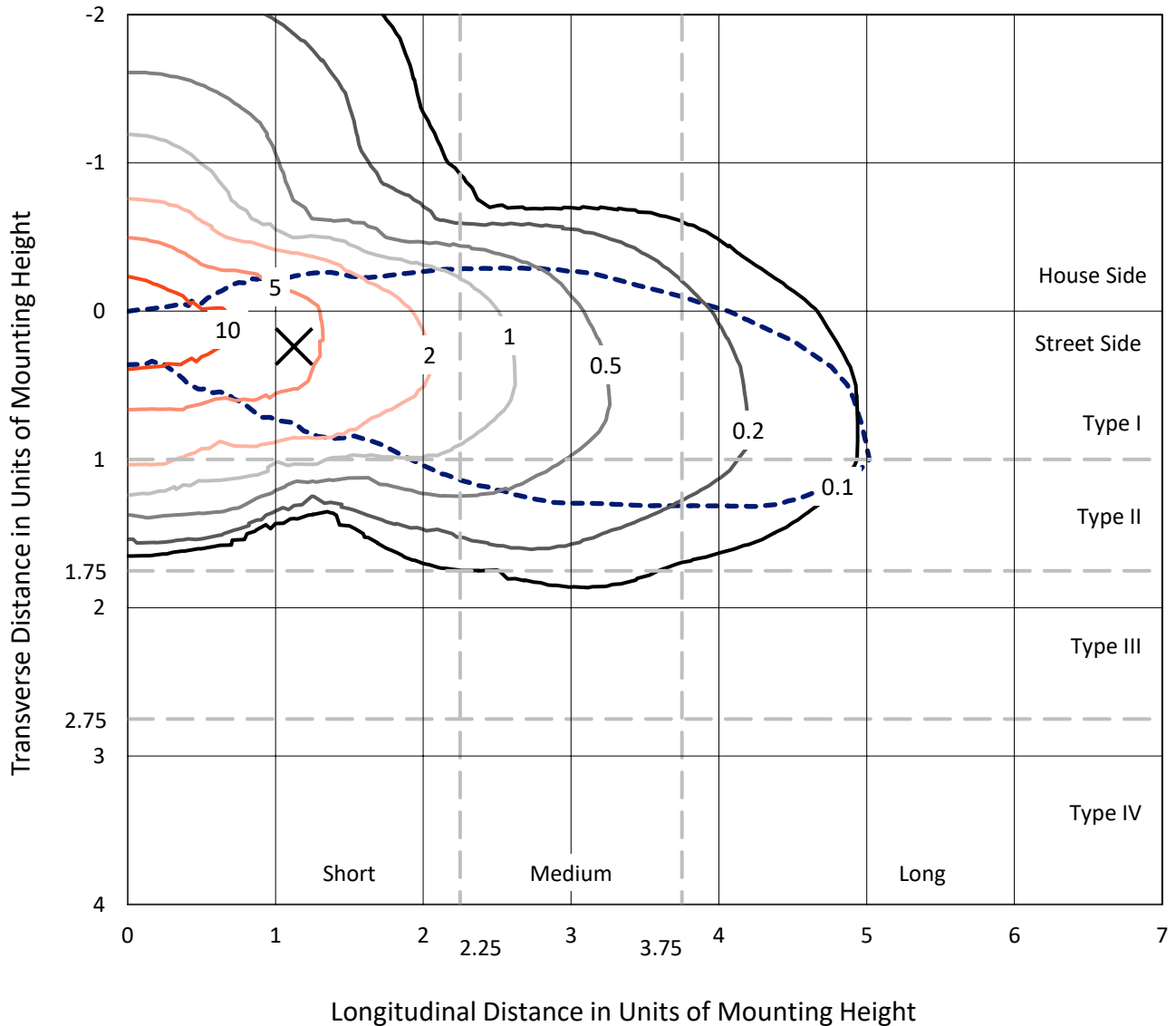
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P591363
 CATALOG NUMBER: CTN-CA8-330-730-U-T2-SSS-HM-EX180

Iso-Footcandle Lines of Horizontal Illumination

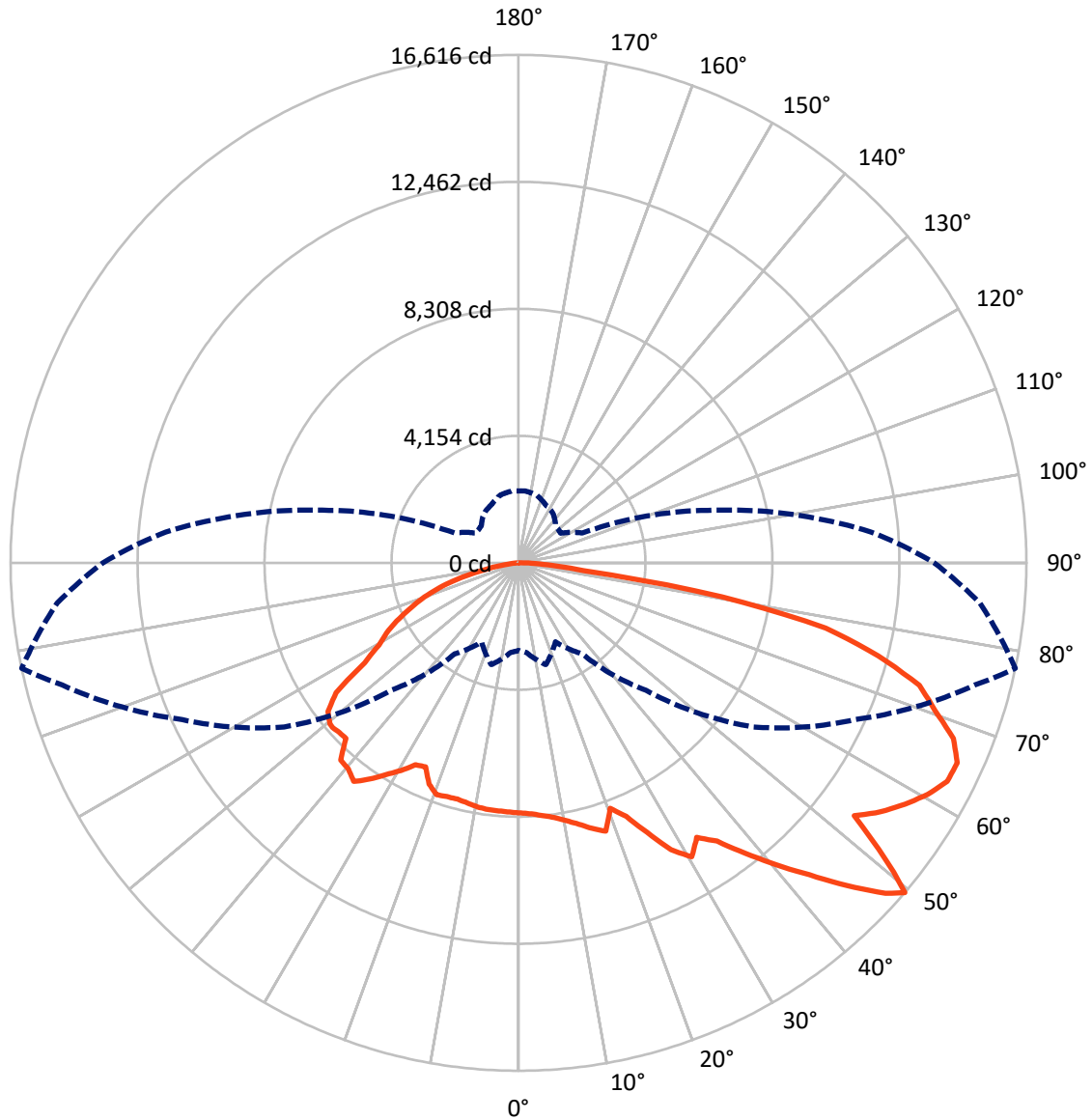
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.1 fc
 Type II - Short - N/A

REPORT NUMBER: P591363
CATALOG NUMBER: CTN-CA8-330-730-U-T2-SSS-HM-EX180

Luminous Intensity Polar Plot



— Vertical Plane Through 78-Deg Lateral - - - Horizontal Cone Through 49-Deg Vertical

REPORT NUMBER: P591363
 CATALOG NUMBER: CTN-CA8-330-730-U-T2-SSS-HM-EX180

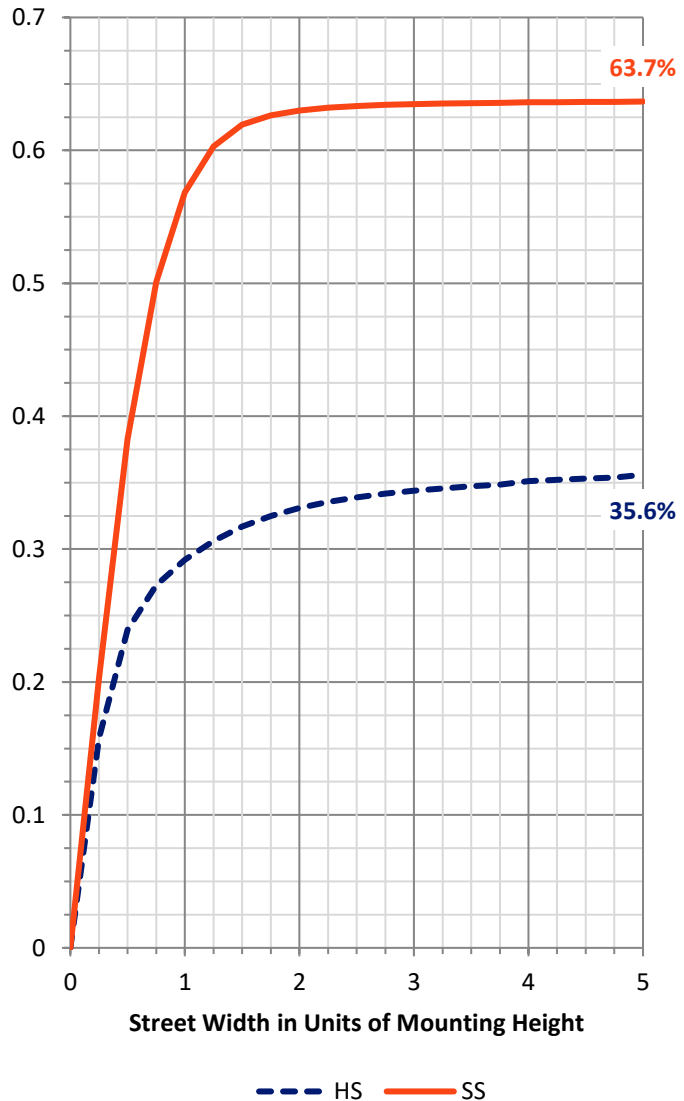
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9636.3	0.0	9636.3
	% Fixture	36.5	0.0	36.5
Street Side	Lumens	16741.7	0.0	16741.7
	% Fixture	63.5	0.0	63.5
Total	Lumens	26378.0	0.0	26378.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	792.8	3.0
10°-20°	2331.5	8.8
20°-30°	3282.7	12.4
30°-40°	4115.0	15.6
40°-50°	4644.7	17.6
50°-60°	4463.0	16.9
60°-70°	3646.0	13.8
70°-80°	2557.7	9.7
80°-90°	544.5	2.1
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°	26378.0	100.0
0°-180°	26378.0	100.0

Coefficient of Utilization



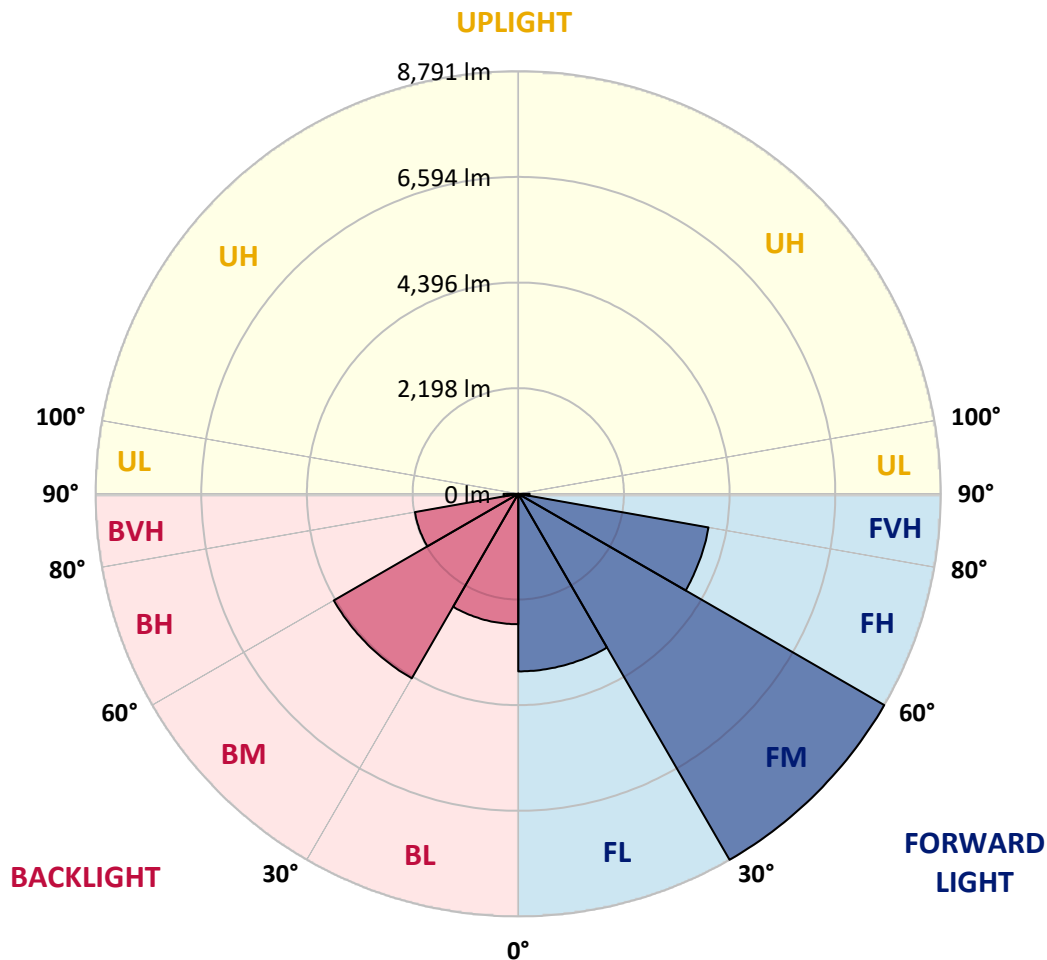
REPORT NUMBER: P591363
 CATALOG NUMBER: CTN-CA8-330-730-U-T2-SSS-HM-EX180

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3693.7	14.0			
FM (30°-60°)	8791.4	33.3			
FH (60°-80°)	4019.5	15.2			G2/5000
FVH (80°-90°)	237.1	0.9			G3/500
BL (0°-30°)	2713.4	10.3	B4/5000		
BM (30°-60°)	4431.3	16.8	B3/5000		
BH (60°-80°)	2184.2	8.3	B3/2500		G3/2500
BVH (80°-90°)	307.4	1.2			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G3

Type II Short





REPORT NUMBER: P591363

CATALOG NUMBER: CTN-CA8-330-730-U-T2-SSS-HM-EX180

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	8181.8	8181.8	8181.8	8181.8	8181.8	8181.8	8181.8	8181.8	8181.8	8181.8	8181.8
2.5°	8519.0	8440.3	8458.1	8499.7	8339.3	8383.9	8312.6	8343.7	8259.1	8223.4	8238.3
5°	9126.6	9034.5	9055.3	9076.1	8839.9	8738.9	8539.8	8493.8	8364.5	8305.1	8297.7
7.5°	9416.2	9321.2	9343.5	9343.5	9163.7	9180.1	8978.0	8764.1	8505.7	8412.1	8370.5
10°	9881.2	9774.2	9757.9	9729.7	9495.0	9391.0	9223.1	9098.4	8706.2	8572.5	8458.1
12.5°	10221.3	10138.2	10139.6	10108.5	9844.0	9768.3	9472.7	9325.6	8937.9	8776.0	8591.8
15°	10362.5	10303.0	10341.7	10248.1	10071.3	9958.4	9818.8	9582.6	9181.5	9015.2	8787.9
17.5°	9704.4	9597.5	9313.7	9362.8	9350.9	9385.0	9248.4	9388.0	9324.1	9233.5	9083.5
20°	8217.5	8330.4	8529.4	8352.7	8339.3	8783.4	9101.3	9058.2	8701.7	8569.5	8719.6
22.5°	6983.1	6844.9	7265.3	7893.7	8070.4	8523.5	9064.2	9578.2	9175.6	9006.3	8551.7
25°	5874.9	6014.6	6668.2	7618.8	8174.4	8308.1	8927.5	9894.6	9958.4	9774.2	9184.5
27.5°	5699.7	5698.2	6139.3	7060.3	8324.4	8743.3	8933.5	9737.1	10750.2	10623.9	9946.5
30°	5659.5	5638.8	5806.6	6739.5	7915.9	9134.0	9503.9	9786.1	10744.2	11166.1	10817.0
32.5°	5487.2	5470.9	5643.2	6081.4	7360.4	9506.9	10050.5	10421.9	10476.8	10707.1	11700.9
35°	5210.9	5249.6	5475.4	5959.6	6904.3	8773.0	10604.6	11185.4	11317.6	11182.4	11189.9
37.5°	4946.5	4976.2	5208.0	5742.7	6571.6	7136.1	10984.9	11919.2	12213.3	12058.8	11336.9
40°	4603.4	4645.0	4919.8	5512.5	6353.2	6158.7	10433.8	12780.8	13189.3	12991.7	12173.2
42.5°	4217.2	4236.5	4561.8	5133.7	4555.9	6191.3	9653.9	13571.0	14142.9	13946.8	12959.0
45°	3887.4	3899.3	4165.2	4529.1	4107.3	6139.3	9114.7	13196.7	15257.0	15060.9	13790.9
47.5°	3424.0	3508.6	3796.8	3131.3	3814.6	6011.6	9295.9	11702.3	16301.3	16155.7	14599.0
49°	2868.4	2944.2	3450.7	2852.1	3633.4	5897.2	9358.3	12139.1	15454.6	16616.2	15153.0
50°	2636.7	2691.6	2644.1	2752.5	3501.2	5781.4	9258.8	12491.1	14203.8	15913.6	15509.5
52.5°	2292.0	2133.1	1816.7	2471.8	3196.7	5329.8	7629.2	13437.3	14073.1	13752.3	14532.1
55°	968.5	1380.0	1607.3	2027.6	2889.2	3235.3	7064.8	14468.2	14704.4	14380.6	13058.6
57.5°	757.6	772.4	883.8	1509.2	1598.3	2505.9	6834.5	14910.9	15181.3	14900.5	13565.1
60°	111.4	109.9	145.6	173.8	396.6	1152.7	4466.7	10613.5	14652.4	15384.8	14028.5
62.5°	40.1	41.6	41.6	49.0	72.8	505.1	3247.2	9902.0	15006.0	15739.8	14416.2
65°	3.0	4.5	7.4	16.3	38.6	476.8	2880.3	10077.3	14891.6	15773.9	14604.9
67.5°	0.0	1.5	4.5	11.9	31.2	469.4	2678.3	9781.7	14411.8	15340.2	14191.9
70°	0.0	0.0	3.0	10.4	28.2	451.6	2326.2	8779.0	13553.2	14450.4	13440.3
72.5°	0.0	0.0	3.0	10.4	25.3	430.8	1911.8	7728.8	12771.9	13710.7	12350.0
75°	0.0	0.0	3.0	8.9	22.3	392.2	1397.8	5601.6	11440.9	12158.4	10802.2
77.5°	0.0	0.0	3.0	8.9	20.8	338.7	944.7	3210.0	9413.3	10280.8	9076.1
80°	0.0	0.0	3.0	7.4	19.3	257.0	534.8	1602.8	4919.8	6757.3	6486.9
82.5°	0.0	0.0	3.0	7.4	14.9	136.7	249.6	699.6	1813.7	2140.5	2498.5
85°	0.0	0.0	3.0	5.9	11.9	34.2	84.7	332.7	990.8	1100.7	1074.0
87.5°	0.0	0.0	3.0	5.9	8.9	13.4	28.2	95.1	366.9	410.0	350.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P591363

CATALOG NUMBER: CTN-CA8-330-730-U-T2-SSS-HM-EX180

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8181.8	8181.8	8181.8	8181.8	8181.8	8181.8	8181.8	8181.8	8181.8	8181.8	8181.8
2.5°	8235.3	8189.3	8146.2	8152.1	8049.6	8027.3	7930.8	7990.2	7950.1	7899.6	7932.3
5°	8253.1	8193.7	8118.0	8033.3	7809.0	7728.8	7595.1	7633.7	7580.2	7520.8	7552.0
7.5°	8291.8	8221.9	8097.2	7877.3	7615.9	7474.8	7320.3	7452.5	7436.1	7402.0	7436.1
10°	8308.1	8247.2	8034.8	7779.3	7416.8	7320.3	7202.9	7180.6	7185.1	7192.5	7243.0
12.5°	8351.2	8260.6	7933.8	7630.7	7301.0	7109.3	6993.5	7061.8	6920.7	6858.3	6885.0
15°	8456.6	8284.3	7855.0	7424.3	7096.0	6944.5	6659.3	6659.3	6623.6	6562.7	6580.5
17.5°	8669.1	8379.4	7834.2	7287.6	6867.2	6605.8	6344.3	6206.2	6167.6	6186.9	6198.8
20°	8783.4	8554.7	7823.8	7107.9	6610.2	6307.2	5910.6	5812.5	5683.3	5701.1	5721.9
22.5°	8095.7	7797.1	7807.5	6888.0	6292.3	5907.6	5473.9	5303.0	5224.3	5209.5	5249.6
25°	8585.9	7984.3	7055.9	6767.7	5943.3	5453.1	5013.4	4778.7	4658.4	4650.9	4676.2
27.5°	9236.5	8499.7	6951.9	6203.2	5571.9	4902.0	4416.2	4248.4	4129.5	4123.6	4128.1
30°	9994.1	9187.5	7210.4	5508.0	5068.3	4266.2	3880.0	3761.1	3652.7	3605.2	3606.7
32.5°	10836.3	9809.9	7459.9	5374.3	4062.7	3712.1	3412.1	3320.0	3171.4	3103.1	3083.8
35°	11625.1	10470.9	7771.9	5150.0	3525.0	3219.0	3008.0	2884.7	2768.9	2710.9	2691.6
37.5°	10929.9	11079.9	8048.1	4965.8	3115.0	2667.9	2609.9	2528.2	2468.8	2424.2	2416.8
40°	11088.8	9980.7	8211.5	4618.2	2691.6	2330.7	2237.1	2277.2	2338.1	2301.0	2299.5
42.5°	11619.2	10151.5	8063.0	4137.0	2355.9	2009.8	2036.5	2186.6	2314.3	2290.6	2293.5
45°	12378.2	10684.8	6919.2	3562.1	2030.6	1810.8	1984.6	2159.8	2320.3	2327.7	2327.7
47.5°	13164.0	11284.9	6706.8	2795.6	1791.4	1733.5	1975.6	2127.2	2311.4	2358.9	2352.9
49°	13599.3	11576.1	6647.4	2301.0	1684.5	1717.2	1974.2	2096.0	2293.5	2360.4	2352.9
50°	13853.3	11775.1	6536.0	2103.4	1622.1	1714.2	1975.6	2076.7	2275.7	2350.0	2347.0
52.5°	14386.5	12027.7	6146.8	1732.0	1470.6	1703.8	1999.4	2058.8	2220.7	2299.5	2329.2
55°	11888.0	11601.3	5493.2	1555.3	1402.3	1683.0	1999.4	2069.2	2173.2	2219.3	2247.5
57.5°	12035.1	9919.8	4319.7	1467.6	1356.2	1660.7	1968.2	2067.7	2148.0	2155.4	2146.5
60°	12483.7	10150.0	3220.4	1378.5	1302.7	1632.5	1901.4	2020.2	2081.1	2081.1	2054.4
62.5°	12752.5	10258.5	2575.8	1280.5	1246.3	1574.6	1801.8	1928.1	1974.2	1948.9	1944.4
65°	12819.4	10346.1	1868.7	1175.0	1182.4	1512.2	1699.3	1809.3	1873.1	1830.1	1839.0
67.5°	12589.1	9720.8	1365.1	1066.5	1109.6	1427.5	1598.3	1696.4	1742.4	1720.1	1724.6
70°	11738.0	9040.4	961.1	880.9	992.3	1296.8	1470.6	1583.5	1607.3	1568.6	1574.6
72.5°	10369.9	7990.2	606.1	689.2	873.4	1176.5	1320.6	1391.9	1396.3	1443.9	1469.1
75°	9031.5	6411.2	438.2	543.7	693.7	1005.6	1206.2	1273.0	1322.0	1559.7	1598.3
77.5°	7238.6	4056.8	372.8	429.3	545.2	834.8	1075.5	1178.0	1619.1	1736.5	1706.8
80°	4386.5	2519.3	280.7	338.7	454.5	641.7	921.0	1213.6	1638.4	1528.5	1466.1
82.5°	2024.7	1094.8	190.1	276.3	361.0	478.3	726.4	1417.1	1403.7	1170.5	1158.6
85°	727.9	323.8	104.0	197.6	252.5	329.8	558.5	1403.7	1100.7	983.4	921.0
87.5°	185.7	57.9	43.1	96.6	127.7	175.3	304.5	742.7	571.9	503.6	485.7
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)