

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: P591382

Luminaire Tested: **CTN-CA8-480-730-U-T4-SSS-HM-EX90**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591382
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-10)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-480-730-U-T4-SSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE, 90D 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: 44264 lumens
Efficiency: N/A
Efficacy: 92.1 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

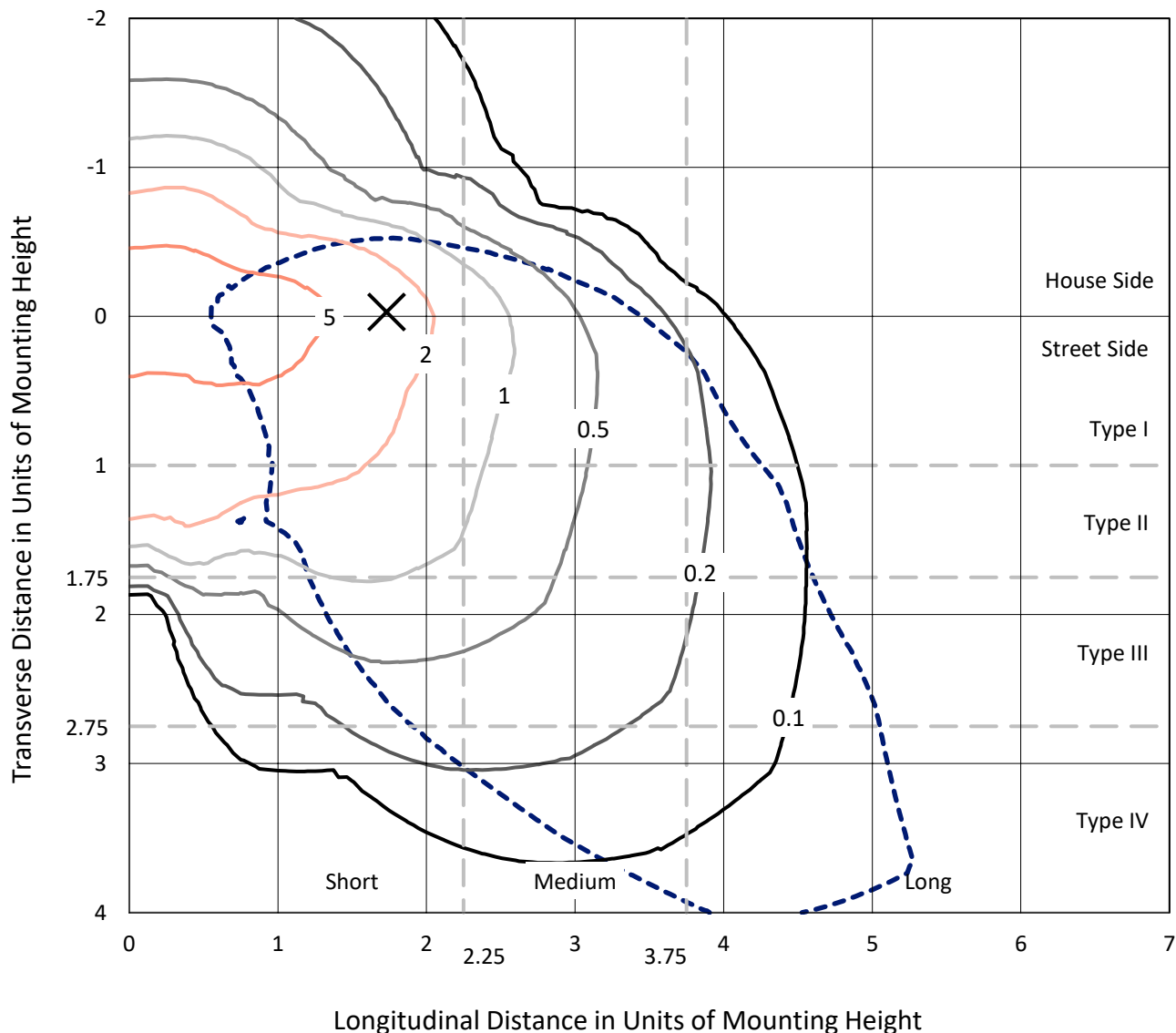
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P591382
 CATALOG NUMBER: CTN-CA8-480-730-U-T4-SSS-HM-EX90

Iso-Footcandle Lines of Horizontal Illumination

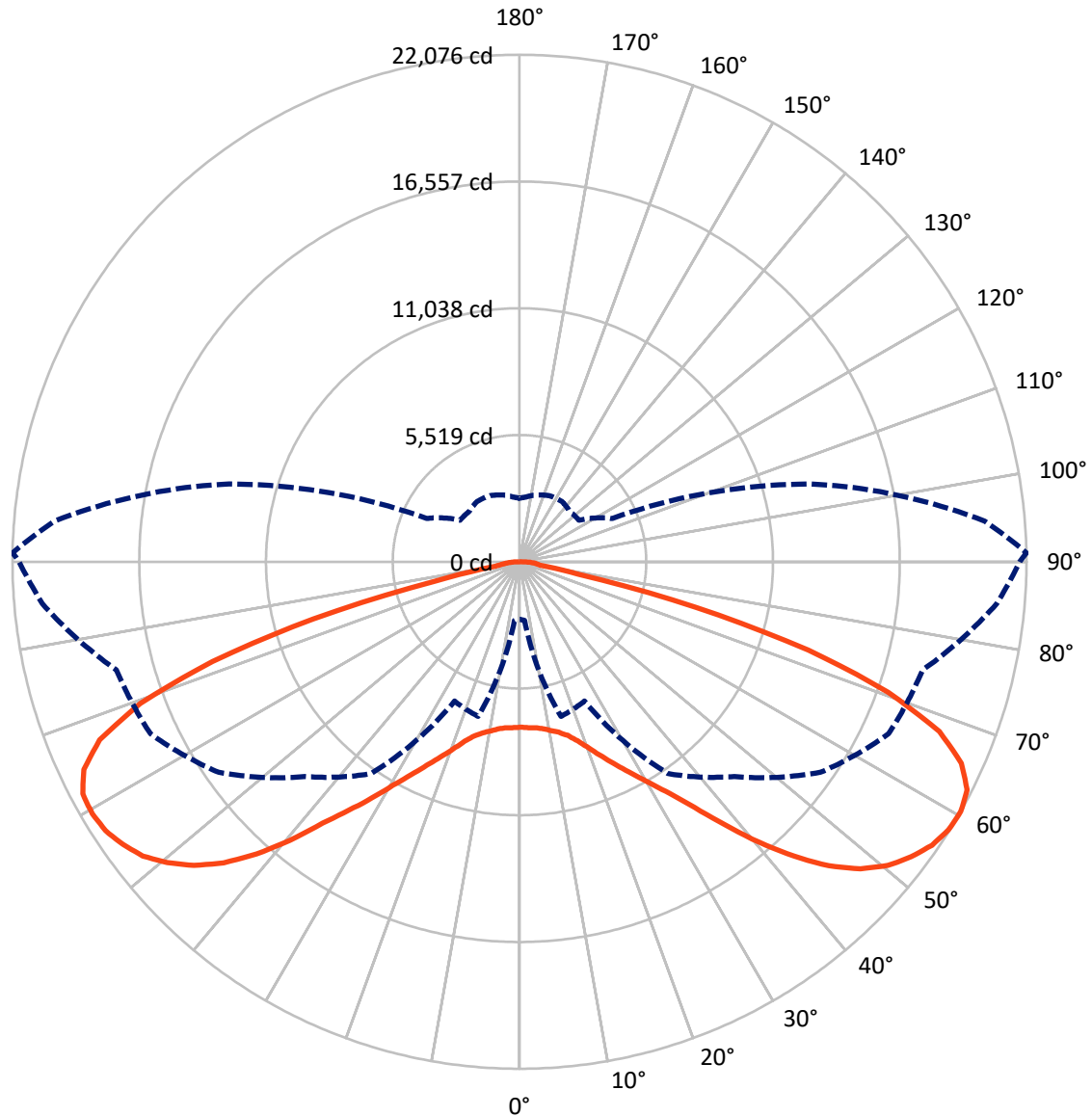
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.4 fc
 Type IV - Short - N/A

REPORT NUMBER: P591382
CATALOG NUMBER: CTN-CA8-480-730-U-T4-SSS-HM-EX90

Luminous Intensity Polar Plot



— Vertical Plane Through 91-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

REPORT NUMBER: P591382
 CATALOG NUMBER: CTN-CA8-480-730-U-T4-SSS-HM-EX90

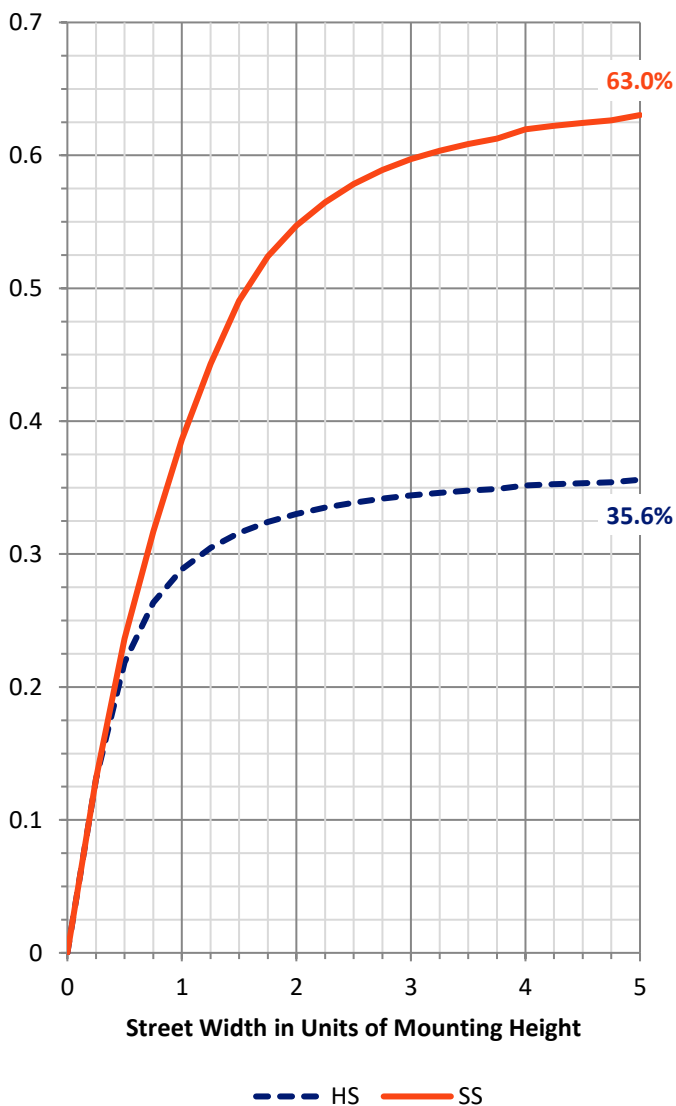
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16075.0	0.0	16075.0
	% Fixture	36.3	0.0	36.3
Street Side	Lumens	28189.0	0.0	28189.0
	% Fixture	63.7	0.0	63.7
Total	Lumens	44264.0	0.0	44264.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	701.9	1.6
10°-20°	2152.6	4.9
20°-30°	3528.7	8.0
30°-40°	4983.6	11.3
40°-50°	7015.4	15.8
50°-60°	8827.5	19.9
60°-70°	8885.5	20.1
70°-80°	6536.9	14.8
80°-90°	1631.8	3.7
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°	44264.0	100.0
0°-180°	44264.0	100.0

Coefficient of Utilization

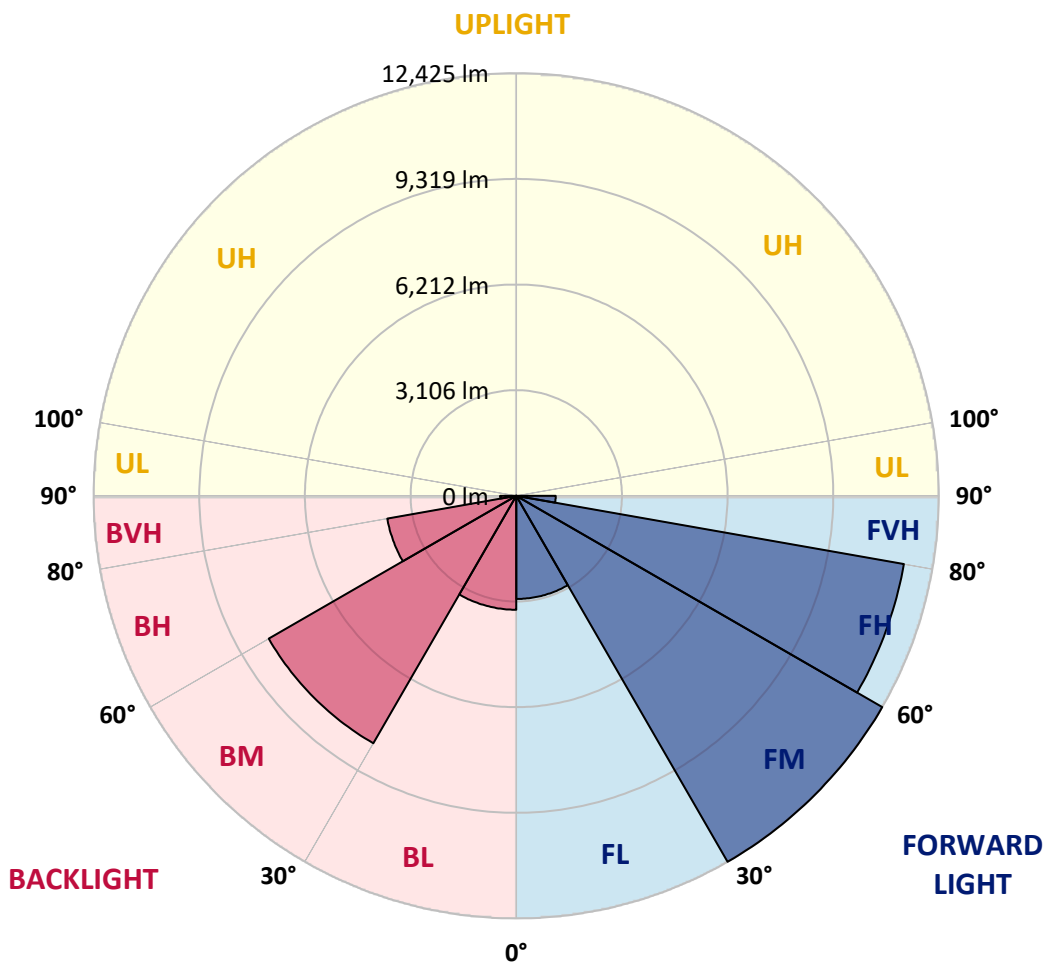


REPORT NUMBER: P591382
 CATALOG NUMBER: CTN-CA8-480-730-U-T4-SSS-HM-EX90

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3032.6	6.9			
FM	(30°-60°)	12424.9	28.1			
FH	(60°-80°)	11572.4	26.1			G4/12000
FVH	(80°-90°)	1159.0	2.6			G5
BL	(0°-30°)	3350.6	7.6	B4/5000		
BM	(30°-60°)	8401.7	19.0	B4/8500		
BH	(60°-80°)	3850.0	8.7	B4/5000		G4/5000
BVH	(80°-90°)	472.8	1.1			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5
 Type IV Short





REPORT NUMBER: P591382

CATALOG NUMBER: CTN-CA8-480-730-U-T4-SSS-HM-EX90

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	7199.0	7199.0	7199.0	7199.0	7199.0	7199.0	7199.0	7199.0	7199.0	7199.0	7199.0
2.5°	7127.8	7082.5	7084.7	7151.5	7050.2	7114.9	7099.8	7203.3	7183.9	7220.5	7229.2
5°	7078.2	7041.5	7041.5	7121.3	7052.3	7108.4	7061.0	7151.5	7183.9	7237.8	7248.6
7.5°	7097.6	7058.8	7073.9	7142.9	7065.3	7123.5	7119.2	7199.0	7218.4	7309.0	7321.9
10°	7132.1	7097.6	7101.9	7160.2	7108.4	7216.2	7196.8	7311.1	7309.0	7451.3	7462.1
12.5°	7071.7	7045.9	7045.9	7123.5	7153.7	7268.0	7306.8	7425.4	7438.4	7598.0	7610.9
15°	6976.8	6933.7	6998.4	7114.9	7177.4	7356.4	7423.3	7610.9	7645.4	7796.4	7828.7
17.5°	6778.4	6797.8	6979.0	6897.0	6612.4	6877.6	7613.1	7852.5	7927.9	8106.9	8184.6
20°	6163.8	5924.4	5449.9	5579.3	6165.9	6922.9	7878.3	8158.7	8324.8	8536.1	8667.7
22.5°	4656.3	4807.2	5693.6	5786.4	5812.2	6316.9	8249.3	8534.0	8753.9	9021.4	9196.1
25°	4828.8	4813.7	5117.8	6068.9	6094.8	6383.8	7766.2	9023.5	9221.9	9592.9	9767.6
27.5°	4988.4	4988.4	4971.1	5730.3	6388.1	6672.8	8018.5	8663.4	9836.6	10239.9	10444.8
30°	5253.7	5262.3	5165.2	5163.1	6629.6	6938.0	8505.9	8825.1	10380.1	11143.5	11191.0
32.5°	5779.9	5749.7	5628.9	5443.4	5734.6	7246.4	8982.6	9409.6	9856.0	12159.3	12116.2
35°	6159.5	6135.7	6049.5	5920.1	5786.4	7386.6	9429.0	10022.1	10753.2	12459.1	13287.3
37.5°	6618.8	6580.0	6483.0	6329.8	6243.6	6377.3	9888.4	10714.4	11874.7	12815.0	14609.3
40°	7121.3	7110.6	6961.7	6763.3	6644.7	6743.9	10239.9	11577.0	13265.7	14326.8	16067.2
42.5°	7507.4	7498.8	7375.8	7261.5	7205.5	7406.0	9366.4	12720.1	14857.3	15700.6	17471.2
45°	7854.6	7841.7	7837.4	7798.5	7843.8	8331.2	10324.0	13425.3	16420.9	16882.5	18748.0
47.5°	8117.7	8078.9	7968.9	7979.7	8106.9	8928.6	11320.4	12362.1	17689.0	17924.1	19744.4
50°	8743.2	8704.3	8324.8	8337.7	8583.6	9670.5	12178.7	13593.5	16509.3	18825.6	20507.8
52.5°	9301.7	8980.4	8773.4	8782.0	9118.4	10459.9	13153.6	14868.1	16229.0	19539.5	21124.6
55°	8033.6	7826.6	9840.9	9560.5	9746.0	11320.4	14100.3	15972.3	16998.9	20085.1	21478.3
57.5°	4714.5	4688.6	10830.8	11074.5	10858.9	12249.9	15057.9	16891.1	17674.0	20594.1	21715.6
60°	2501.7	2562.1	6966.1	6694.3	11255.7	13220.4	15985.3	17725.7	18174.3	20857.2	21780.3
62.5°	230.8	204.9	4578.6	5201.9	10088.9	14488.5	17085.2	18575.4	18512.9	20997.4	21666.0
65°	45.3	60.4	4492.4	5139.4	11210.4	16591.3	18881.7	19228.9	18696.2	20829.2	21066.4
67.5°	34.5	51.8	4244.3	5083.3	11898.4	17400.1	20949.9	19459.7	18707.0	20292.2	19746.5
70°	34.5	53.9	3746.1	4751.2	12224.0	17434.6	21439.5	19369.1	18465.5	19075.8	17259.9
72.5°	34.5	53.9	3146.6	4117.1	11669.8	16686.2	20581.2	18866.6	17566.1	16425.2	13462.0
75°	34.5	49.6	2469.4	3345.0	10086.8	15532.4	19108.1	16679.7	14786.2	12019.2	8637.5
77.5°	34.5	47.4	1820.2	2618.2	8417.5	13699.2	16617.2	13710.0	11145.7	6293.2	3178.9
80°	32.4	47.4	1108.5	1846.1	6485.1	11050.8	13058.7	10129.9	5857.5	1583.0	918.7
82.5°	32.4	45.3	528.4	1181.9	4557.1	7895.6	8521.0	4339.2	1246.6	731.1	731.1
85°	28.0	41.0	282.5	642.7	2978.4	5176.0	4110.6	735.4	487.4	493.9	562.9
87.5°	17.3	21.6	133.7	289.0	1716.7	2767.0	1583.0	269.6	202.7	213.5	319.2
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: P591382

CATALOG NUMBER: CTN-CA8-480-730-U-T4-SSS-HM-EX90

CANDELA DISTRIBUTION (continued):

	91°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7199.0	7199.0	7199.0	7199.0	7199.0	7199.0	7199.0	7199.0	7199.0	7199.0	7199.0
2.5°	7235.6	7224.9	7248.6	7324.1	7311.1	7365.0	7321.9	7397.4	7412.5	7390.9	7425.4
5°	7259.4	7274.5	7354.3	7425.4	7386.6	7472.9	7496.6	7602.3	7600.1	7580.7	7623.8
7.5°	7337.0	7378.0	7457.8	7546.2	7565.6	7634.6	7626.0	7759.7	7744.6	7736.0	7779.1
10°	7470.7	7533.3	7608.8	7755.4	7708.0	7824.4	7744.6	7835.2	7826.6	7805.0	7843.8
12.5°	7619.5	7705.8	7796.4	7930.1	7910.7	7908.5	7837.4	7865.4	7841.7	7789.9	7822.3
15°	7843.8	7949.5	8074.6	8160.9	8046.6	8003.4	7891.3	7830.9	7748.9	7628.2	7647.6
17.5°	8193.2	8318.3	8452.0	8467.1	8290.3	8178.1	7906.4	7690.7	7477.2	7315.4	7330.5
20°	8663.4	8777.7	8876.9	8805.7	8566.3	8316.1	7906.4	7565.6	7166.6	6869.0	6847.4
22.5°	9213.3	9247.8	9342.7	9168.0	8756.1	8406.7	7884.8	7378.0	6728.8	6332.0	6284.6
25°	9806.4	9802.1	9761.1	9398.8	8874.7	8357.1	7720.9	7056.6	6228.5	5814.4	5779.9
27.5°	10451.2	10397.3	10117.0	9592.9	8825.1	8178.1	7410.3	6515.3	5773.4	5417.6	5406.8
30°	11178.0	11035.7	10468.5	9612.3	8639.6	7824.4	6905.7	5969.7	5368.0	5050.9	5020.7
32.5°	12025.6	11747.4	10748.9	9549.8	8305.4	7285.2	6291.0	5540.5	5035.8	4688.6	4621.8
35°	13132.0	12644.6	11007.7	9344.9	7809.3	6644.7	5723.8	5158.8	4727.4	4371.6	4300.4
37.5°	14523.1	13807.0	11398.0	9045.1	7242.1	6073.2	5331.3	4906.4	4513.9	4093.4	4007.1
40°	16067.2	15174.4	11855.2	8753.9	6702.9	5648.3	5074.7	4787.8	4375.9	3914.4	3832.4
42.5°	17529.5	16550.3	12541.1	8376.5	6189.7	5307.6	4981.9	4753.3	4311.2	3836.7	3748.3
45°	18879.5	17760.2	13248.5	7997.0	5667.7	5029.4	4904.3	4651.9	4212.0	3746.1	3644.8
47.5°	19981.6	18713.5	13873.9	7604.4	5208.4	4811.5	4755.5	4457.8	4037.3	3599.5	3504.6
50°	20781.7	19444.6	14240.5	7240.0	4766.3	4593.7	4494.5	4181.8	3791.4	3427.0	3357.9
52.5°	21348.9	20076.5	14423.8	7199.0	4365.1	4300.4	4190.4	3897.1	3584.4	3301.9	3219.9
55°	21786.7	20421.6	14266.4	6959.6	3985.5	3931.6	3817.3	3636.2	3448.5	3185.4	3131.5
57.5°	22024.0	20579.0	13906.2	5870.5	3582.2	3489.5	3474.4	3435.6	3271.7	3010.7	2969.7
60°	22075.7	20328.8	13091.0	4464.3	3159.5	3099.1	3213.4	3163.8	3017.2	2823.1	2764.9
62.5°	21873.0	19794.0	11544.7	3338.5	2808.0	2907.2	3023.7	2948.2	2777.8	2588.0	2551.3
65°	21141.9	18566.8	9303.9	2598.8	2646.2	2816.6	2920.1	2829.6	2622.5	2406.8	2383.1
67.5°	19712.0	16656.0	6125.0	2337.8	2570.8	2741.1	2857.6	2713.1	2503.9	2271.0	2242.9
70°	17031.3	13166.5	2918.0	2180.4	2426.3	2594.5	2687.2	2523.3	2320.6	2092.0	2061.8
72.5°	13153.6	8948.0	1611.0	2007.9	2247.3	2402.5	2469.4	2275.3	2087.7	1992.8	1984.1
75°	7917.2	3845.4	1455.8	1837.5	2016.5	2161.0	2279.6	2133.0	1969.0	1783.6	1736.1
77.5°	2613.9	1117.2	1369.5	1634.8	1837.5	2012.2	2068.3	1925.9	1721.0	1563.6	1550.6
80°	916.6	936.0	1276.8	1360.9	1600.3	1746.9	1809.5	1645.5	1548.5	1384.6	1352.2
82.5°	746.2	838.9	1030.9	1026.6	1263.8	1436.3	1531.2	1490.3	1363.0	1231.5	1218.5
85°	610.3	767.8	653.5	718.2	905.8	1093.4	1274.6	1278.9	1181.9	1048.1	959.7
87.5°	362.3	392.5	325.7	366.6	478.8	614.7	711.7	679.4	556.4	470.2	459.4
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)