

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: STREETWORKS

Report Number: P399651

Luminaire Tested: **ARCH-L-PA3-170-750-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399651
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-170-750-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20844 lumens
Efficiency: N/A
Efficacy: 120.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

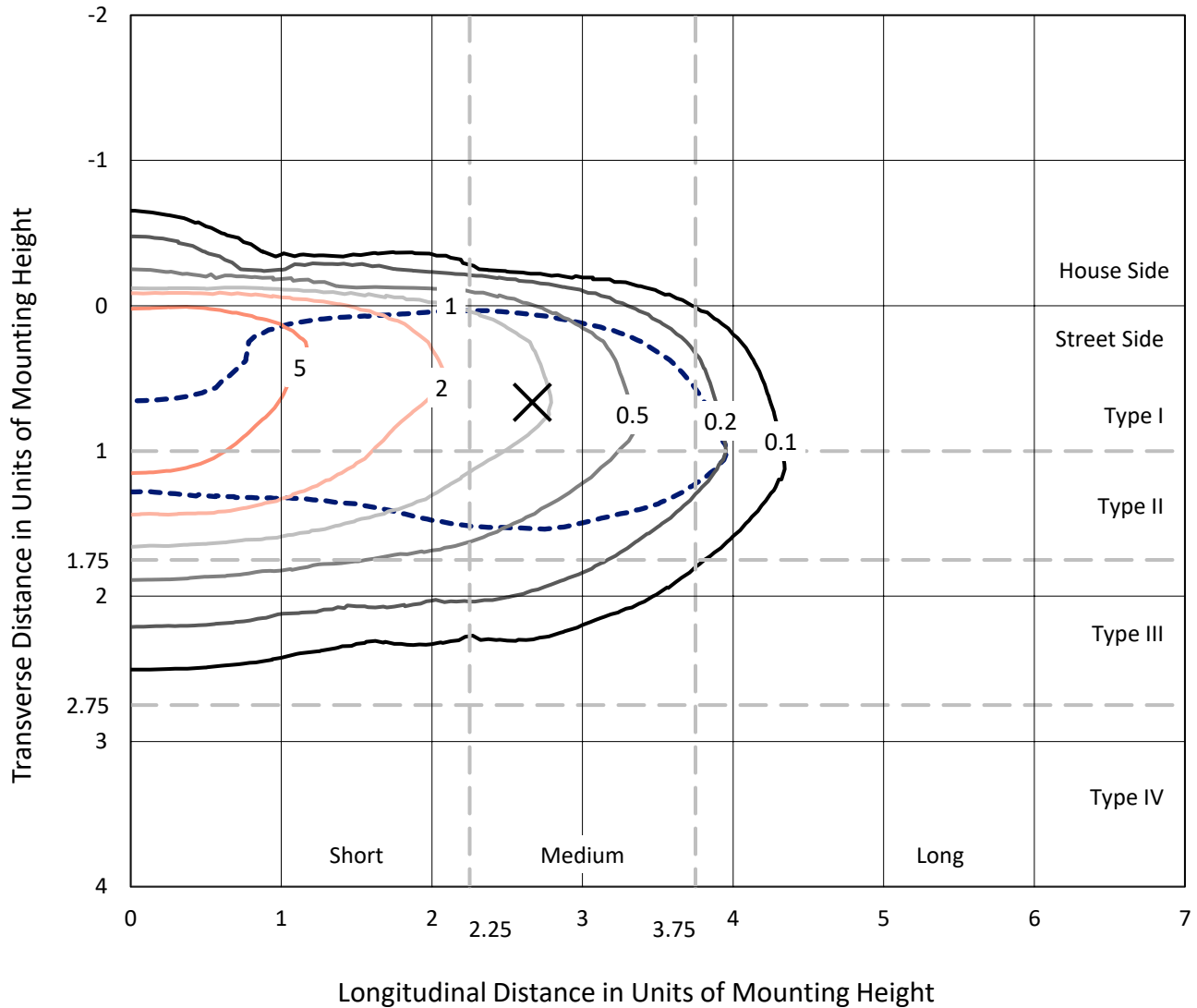
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P399651
 CATALOG NUMBER: ARCH-L-PA3-170-750-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

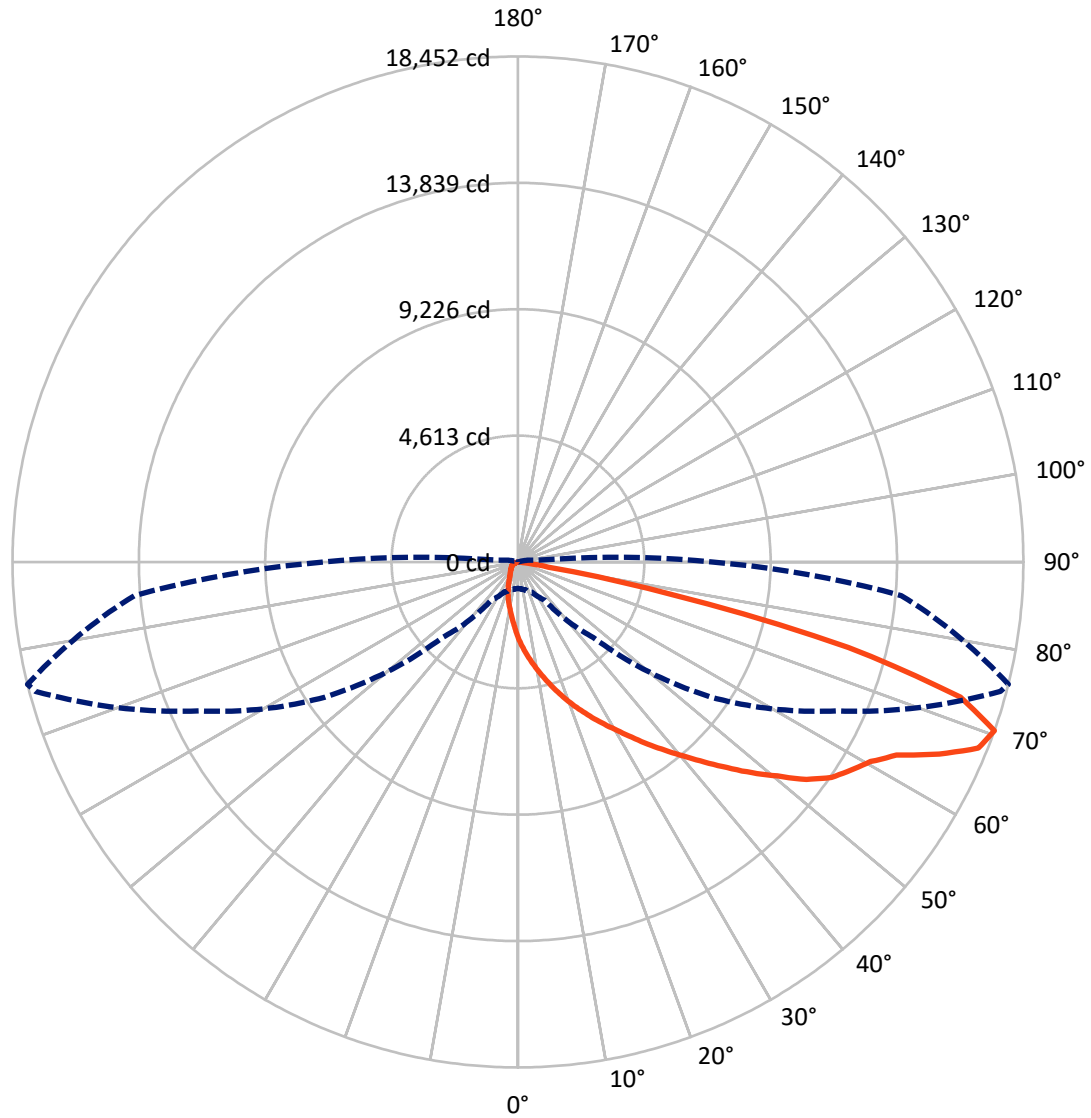
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 fc
 Type II - Medium - N/A

REPORT NUMBER: P399651
CATALOG NUMBER: ARCH-L-PA3-170-750-U-T2R-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P399651
 CATALOG NUMBER: ARCH-L-PA3-170-750-U-T2R-HSS

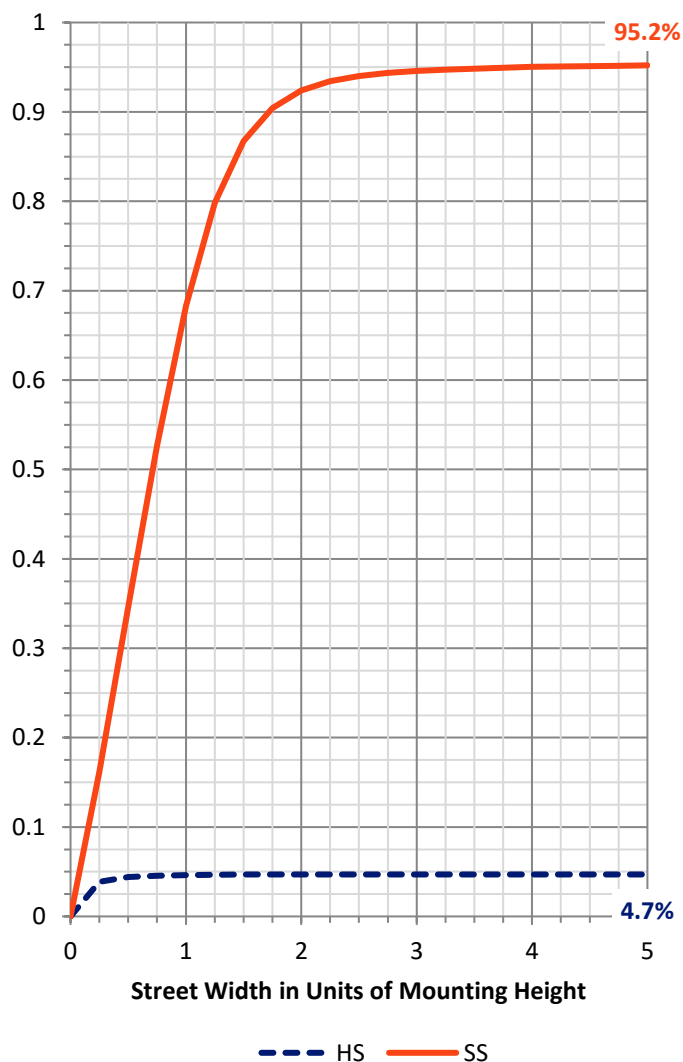
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	983.1	0.0	983.1
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	19860.9	0.0	19860.9
	% Fixture	95.3	0.0	95.3
Total	Lumens	20844.0	0.0	20844.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.8	1.3
10°-20°	848.3	4.1
20°-30°	1579.9	7.6
30°-40°	2794.5	13.4
40°-50°	4273.5	20.5
50°-60°	4845.1	23.2
60°-70°	4153.5	19.9
70°-80°	2011.7	9.7
80°-90°	74.6	0.4
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°	20844.0	100.0
0°-180°	20844.0	100.0

Coefficient of Utilization

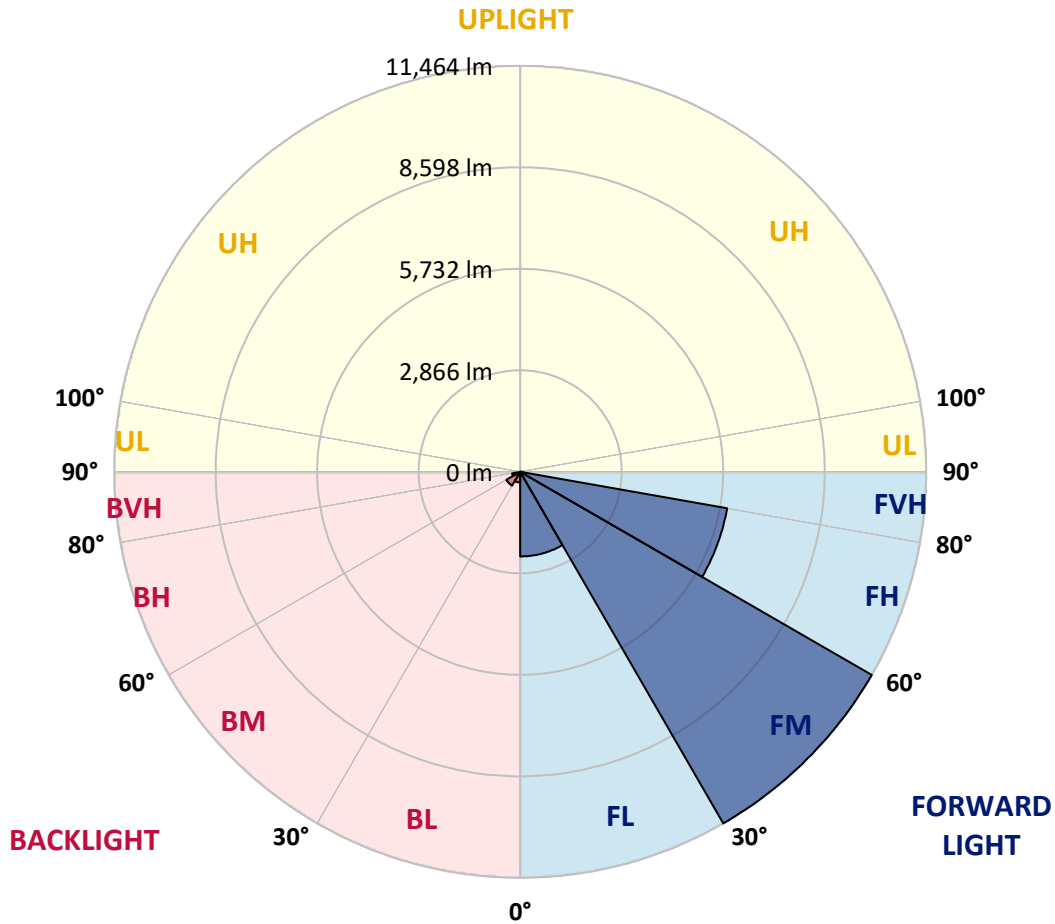


REPORT NUMBER: P399651
 CATALOG NUMBER: ARCH-L-PA3-170-750-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2389.5	11.5			
FM (30°-60°)	11464.4	55.0			
FH (60°-80°)	5933.7	28.5			G3/7500
FVH (80°-90°)	73.3	0.4			G1/100
BL (0°-30°)	301.6	1.4	B1/500		
BM (30°-60°)	448.8	2.2	B1/1000		
BH (60°-80°)	231.5	1.1	B1/500		G1/500
BVH (80°-90°)	1.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3
 Type II Medium





REPORT NUMBER: P399651

CATALOG NUMBER: ARCH-L-PA3-170-750-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2790.1	2790.1	2790.1	2790.1	2790.1	2790.1	2790.1	2790.1	2790.1	2790.1	2790.1
2.5°	3813.8	3793.0	3772.2	3692.4	3619.5	3553.6	3428.6	3265.5	3119.8	3088.5	2918.5
5°	4480.1	4455.8	4424.6	4344.8	4251.1	4140.0	3956.1	3706.3	3449.5	3393.9	3078.1
7.5°	4931.3	4910.4	4865.3	4827.2	4733.5	4625.9	4421.1	4129.6	3775.7	3706.3	3262.1
10°	5240.1	5226.2	5219.3	5188.1	5118.7	5031.9	4827.2	4521.8	4105.3	4025.5	3456.4
12.5°	5351.2	5351.2	5385.9	5437.9	5448.3	5420.6	5233.2	4927.8	4452.4	4369.1	3685.4
15°	5201.9	5219.3	5295.6	5462.2	5635.7	5750.3	5632.3	5347.7	4834.1	4743.9	3956.1
17.5°	5160.3	5177.7	5229.7	5375.5	5608.0	5913.4	5972.3	5753.7	5195.0	5118.7	4233.7
20°	5278.3	5295.6	5340.8	5465.7	5642.7	5951.5	6197.9	6145.9	5576.7	5496.9	4514.8
22.5°	5559.4	5569.8	5569.8	5667.0	5823.1	6052.2	6340.2	6517.2	5968.9	5882.1	4792.5
25°	6163.2	6142.4	6059.1	6010.5	6111.2	6298.6	6520.7	6843.4	6406.1	6288.1	5090.9
27.5°	6954.4	7023.8	6822.6	6590.1	6513.7	6621.3	6774.0	7131.4	6829.5	6704.6	5361.6
30°	8026.8	7999.0	7735.2	7402.1	7072.4	7034.3	7086.3	7377.8	7252.9	7134.9	5663.5
32.5°	8908.2	8960.3	8682.6	8276.6	7783.8	7551.3	7495.8	7672.8	7704.0	7627.7	6020.9
35°	9813.9	9869.5	9598.8	9147.7	8561.2	8172.5	8012.9	8037.2	8262.7	8165.6	6395.7
37.5°	10626.0	10674.6	10407.4	9945.8	9359.3	8883.9	8654.9	8467.5	8804.1	8717.3	6791.3
40°	11243.7	11250.6	11070.2	10657.2	10102.0	9609.2	9348.9	8981.1	9376.7	9317.7	7204.3
42.5°	11681.0	11694.8	11563.0	11209.0	10695.4	10237.3	10025.6	9588.4	10036.0	9984.0	7683.2
45°	11885.7	11910.0	11896.1	11569.9	11143.1	10747.5	10678.0	10233.8	10757.9	10709.3	8235.0
47.5°	11691.4	11691.4	11868.3	11823.2	11431.1	11167.4	11247.2	10907.1	11542.1	11497.0	8797.2
50°	10882.8	10893.2	11254.1	11771.2	11542.1	11483.1	11733.0	11566.4	12253.6	12281.3	9470.4
52.5°	8759.0	8741.6	9959.7	10952.2	11465.8	11625.4	12180.7	12239.7	13107.2	13190.5	10140.2
55°	6544.9	6534.5	7700.5	9501.6	10931.4	11552.6	12430.5	12840.0	13836.0	13888.1	10639.9
57.5°	5181.1	5153.4	5795.4	7658.9	9723.7	11226.3	12440.9	12954.5	14242.0	14332.2	11125.7
60°	3983.9	3959.6	4438.5	5698.2	8012.9	10358.8	12142.5	12961.5	14634.2	14793.8	11778.1
62.5°	2849.1	2876.9	3244.7	4088.0	6163.2	9133.8	11753.8	13058.7	15331.7	15512.1	12704.7
65°	1922.5	1908.7	2214.0	2783.2	4383.0	7485.4	11156.9	13263.4	16587.9	16903.7	13815.2
67.5°	1336.1	1346.5	1485.3	1811.5	2783.2	5746.8	10164.4	13377.9	17885.8	18132.2	14592.5
70°	964.7	978.6	1055.0	1218.1	1700.4	3897.1	8592.4	12853.9	18236.3	18451.5	14051.2
72.5°	635.1	662.8	777.3	864.1	1086.2	2439.6	6329.8	11073.7	16726.7	16886.4	11788.5
75°	343.6	350.5	499.7	645.5	773.9	1520.0	3775.7	7468.0	12513.8	12461.8	7773.4
77.5°	267.2	277.6	308.9	461.5	520.5	836.3	1492.2	3373.1	5927.2	5767.6	2651.3
80°	163.1	170.0	215.2	274.2	364.4	485.8	437.3	916.2	1204.2	1127.8	388.7
82.5°	97.2	104.1	128.4	229.0	288.0	229.0	152.7	222.1	225.6	222.1	97.2
85°	17.4	17.4	90.2	159.6	152.7	65.9	90.2	72.9	65.9	69.4	20.8
87.5°	0.0	0.0	34.7	48.6	69.4	24.3	34.7	17.4	17.4	17.4	10.4
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: P399651

CATALOG NUMBER: ARCH-L-PA3-170-750-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2790.1	2790.1	2790.1	2790.1	2790.1	2790.1	2790.1	2790.1	2790.1	2790.1	2790.1
2.5°	2814.4	2696.4	2453.5	2241.8	2030.1	1873.9	1756.0	1634.5	1592.9	1540.8	1513.0
5°	2863.0	2630.5	2148.1	1762.9	1436.7	1186.8	1027.2	930.0	867.6	822.5	812.0
7.5°	2935.9	2578.4	1901.7	1381.2	1023.7	773.9	642.0	576.1	541.4	520.5	513.6
10°	3022.6	2533.3	1658.8	1075.8	721.8	544.8	472.0	444.2	430.3	423.4	419.9
12.5°	3144.1	2516.0	1454.0	829.4	544.8	447.7	409.5	392.1	381.7	371.3	367.8
15°	3303.7	2522.9	1266.7	642.0	451.1	399.1	367.8	350.5	336.6	326.2	326.2
17.5°	3470.3	2533.3	1082.7	520.5	409.5	364.4	329.7	305.4	295.0	284.6	281.1
20°	3626.4	2529.8	905.7	444.2	371.3	326.2	291.5	267.2	249.9	239.4	239.4
22.5°	3775.7	2509.0	739.2	399.1	340.1	288.0	249.9	225.6	211.7	201.3	201.3
25°	3935.3	2467.4	603.8	364.4	301.9	253.3	215.2	190.9	180.5	170.0	170.0
27.5°	4060.2	2398.0	492.8	333.1	267.2	218.6	183.9	163.1	152.7	145.8	145.8
30°	4195.6	2297.3	409.5	298.4	232.5	187.4	156.2	138.8	128.4	124.9	124.9
32.5°	4344.8	2186.3	350.5	263.7	197.8	159.6	131.9	121.5	111.0	107.6	107.6
35°	4518.3	2089.1	315.8	229.0	173.5	135.3	114.5	104.1	97.2	97.2	97.2
37.5°	4716.1	1988.5	284.6	201.3	149.2	114.5	97.2	93.7	90.2	86.8	86.8
40°	4931.3	1880.9	256.8	177.0	128.4	97.2	83.3	83.3	79.8	79.8	79.8
42.5°	5174.2	1787.2	232.5	156.2	111.0	83.3	72.9	72.9	69.4	69.4	69.4
45°	5437.9	1700.4	211.7	138.8	97.2	72.9	65.9	62.5	59.0	59.0	59.0
47.5°	5750.3	1651.9	194.3	121.5	83.3	62.5	55.5	52.1	48.6	45.1	45.1
50°	6149.3	1672.7	177.0	100.6	72.9	52.1	45.1	41.6	38.2	34.7	34.7
52.5°	6465.1	1662.3	152.7	86.8	59.0	41.6	34.7	31.2	27.8	24.3	24.3
55°	6694.2	1620.6	131.9	72.9	45.1	34.7	27.8	20.8	17.4	17.4	17.4
57.5°	6919.7	1579.0	111.0	59.0	34.7	24.3	17.4	13.9	13.9	13.9	13.9
60°	7270.2	1520.0	97.2	48.6	27.8	17.4	10.4	10.4	6.9	6.9	6.9
62.5°	7697.1	1447.1	79.8	41.6	20.8	13.9	6.9	6.9	0.0	0.0	0.0
65°	8165.6	1318.7	65.9	31.2	17.4	10.4	6.9	0.0	0.0	0.0	0.0
67.5°	8058.0	1058.4	55.5	20.8	13.9	6.9	3.5	0.0	0.0	0.0	0.0
70°	7128.0	714.9	45.1	17.4	10.4	6.9	3.5	0.0	0.0	0.0	0.0
72.5°	5583.7	423.4	31.2	13.9	6.9	3.5	0.0	0.0	0.0	0.0	0.0
75°	3574.4	211.7	20.8	10.4	6.9	3.5	0.0	0.0	0.0	0.0	0.0
77.5°	1197.2	104.1	13.9	6.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	170.0	34.7	6.9	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	38.2	13.9	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.9	6.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.9	3.5	0.0	0.0	0.0	0.0	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)