

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: P399680

Luminaire Tested: **ARCH-L-PA3-170-830-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399680
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-170-830-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14342 lumens
Efficiency: N/A
Efficacy: 82.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

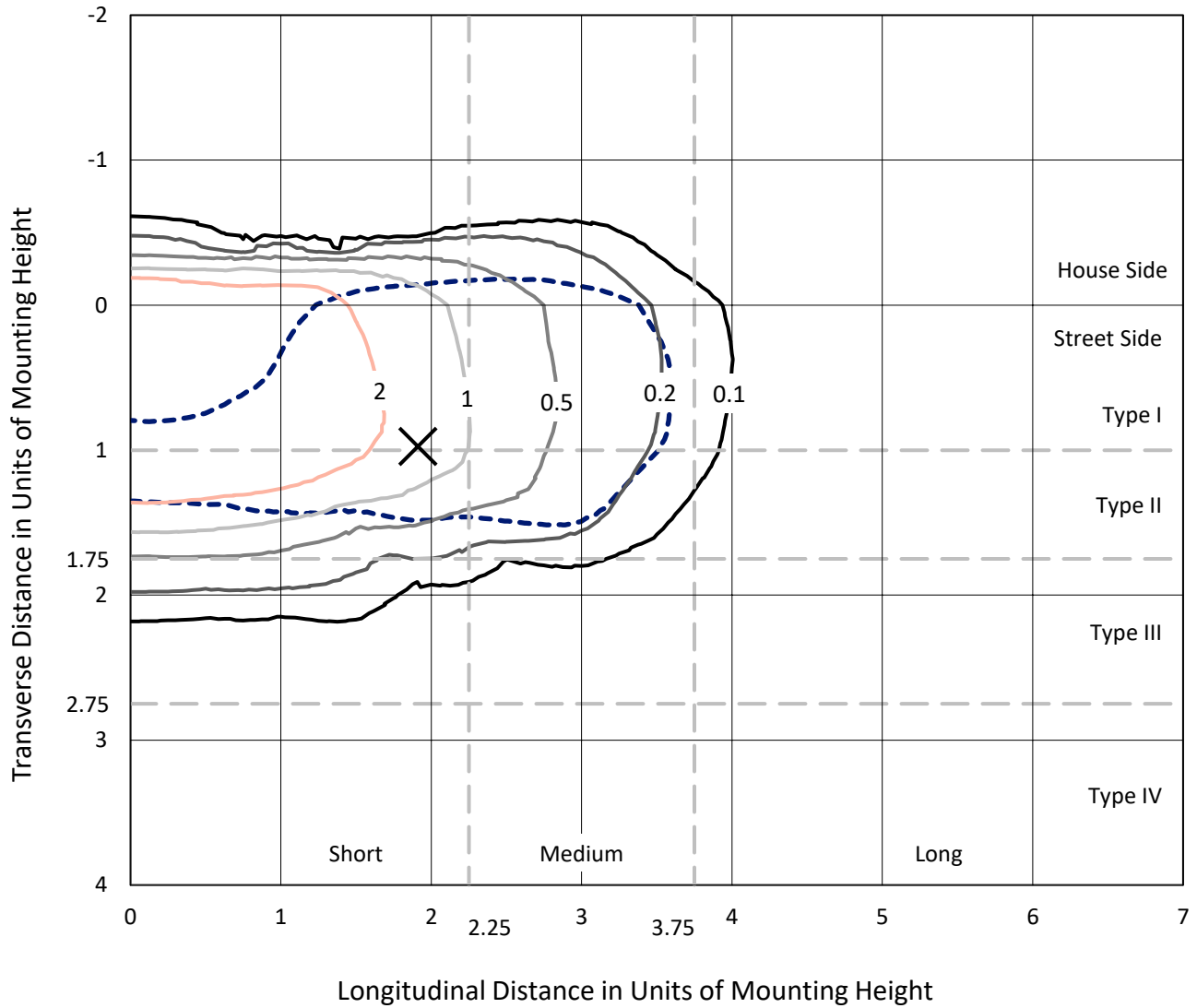
Input Watts (W): 173
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P399680
 CATALOG NUMBER: ARCH-L-PA3-170-830-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

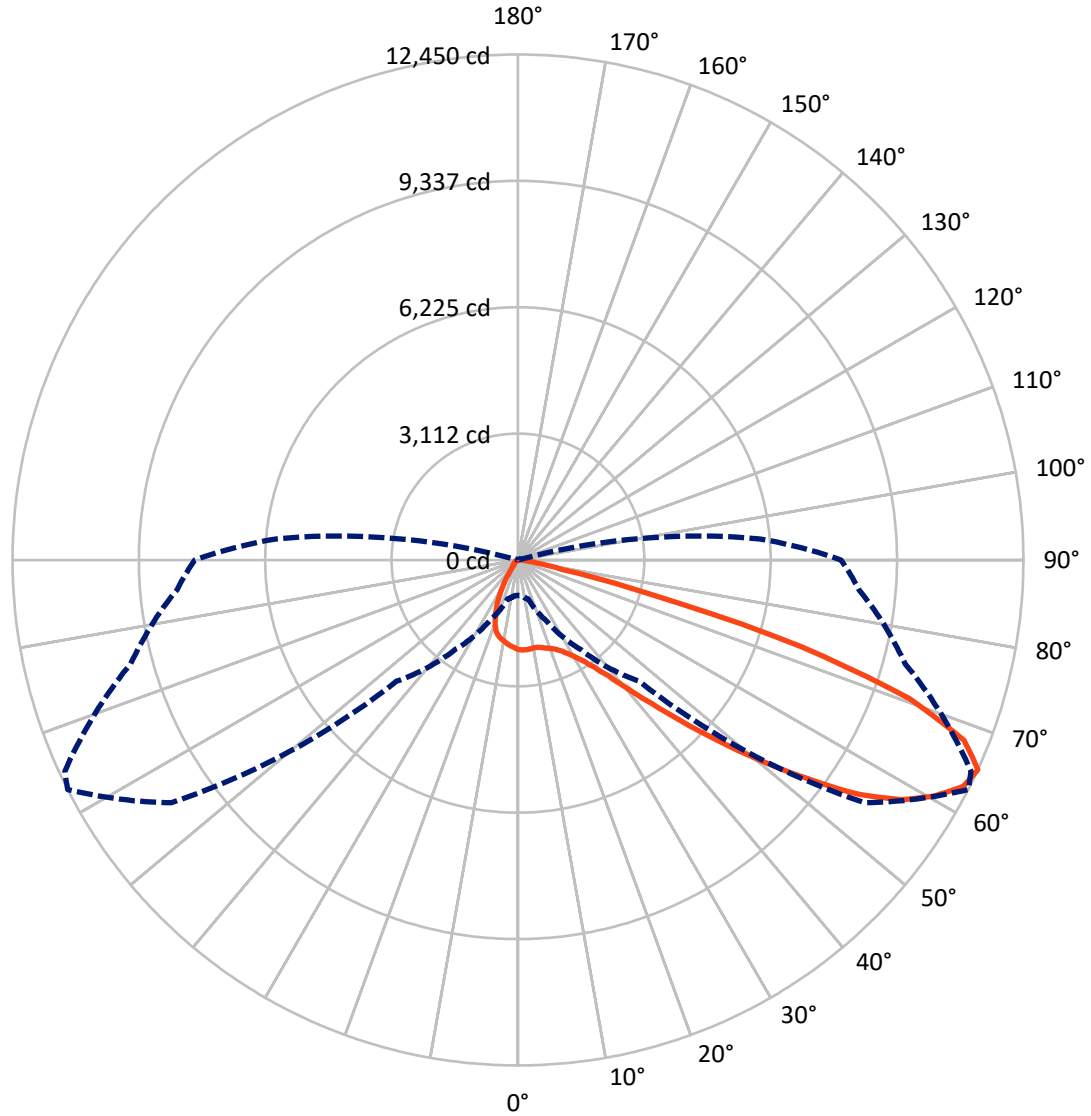
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
 Type II - Short - N/A

REPORT NUMBER: P399680
CATALOG NUMBER: ARCH-L-PA3-170-830-U-T2U-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P399680
 CATALOG NUMBER: ARCH-L-PA3-170-830-U-T2U-HSS

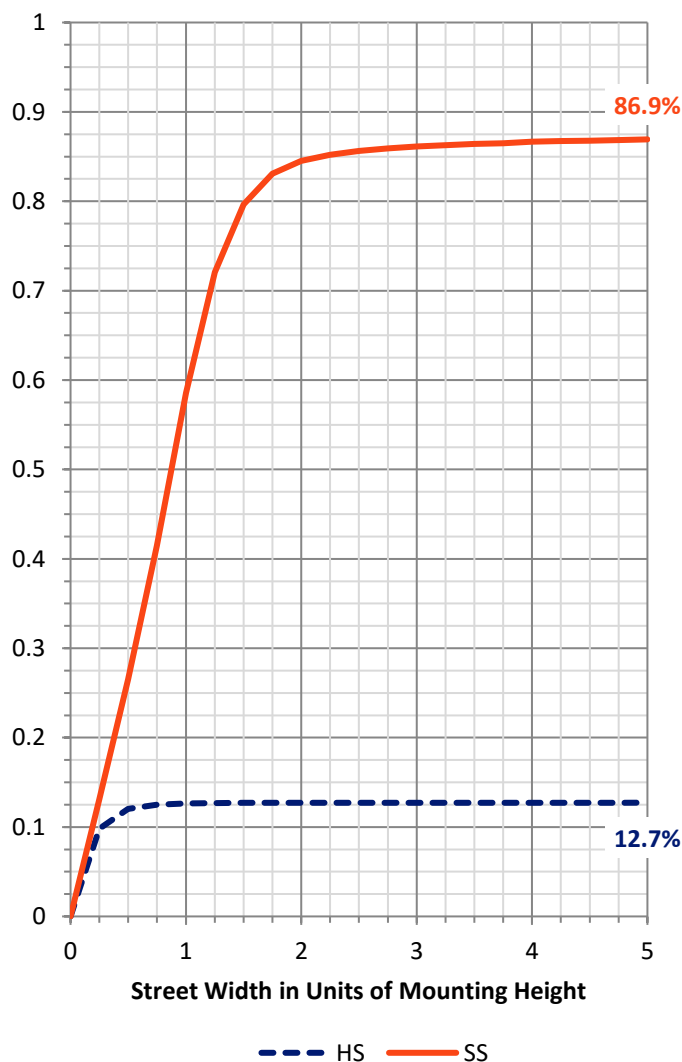
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1845.8	0.0	1845.8
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	12496.2	0.0	12496.2
	% Fixture	87.1	0.0	87.1
Total	Lumens	14342.0	0.0	14342.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.6	1.4
10°-20°	497.3	3.5
20°-30°	737.1	5.1
30°-40°	1368.7	9.5
40°-50°	2899.5	20.2
50°-60°	4009.2	28.0
60°-70°	3209.5	22.4
70°-80°	1333.5	9.3
80°-90°	85.6	0.6
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°	14342.0	100.0
0°-180°	14342.0	100.0

Coefficient of Utilization



REPORT NUMBER: P399680

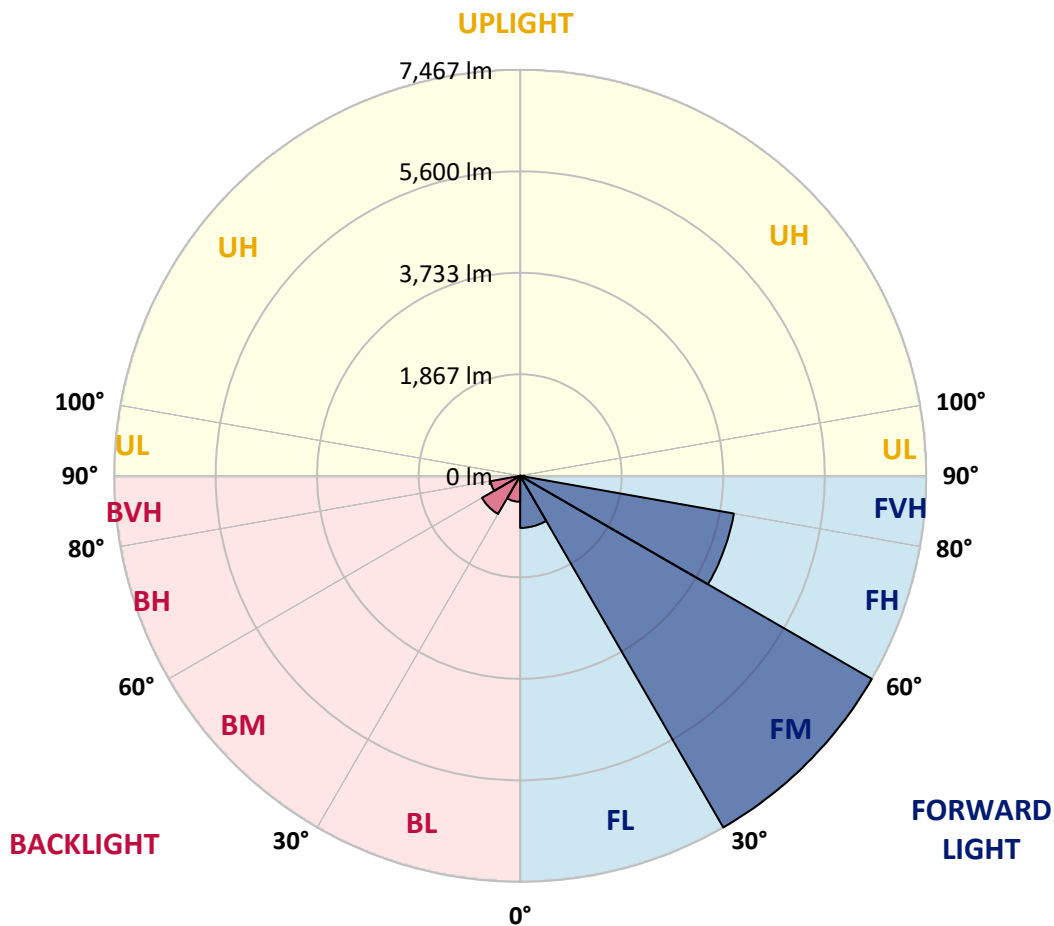
CATALOG NUMBER: ARCH-L-PA3-170-830-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	957.7	6.7			
FM (30°-60°)	7466.5	52.1			
FH (60°-80°)	3990.3	27.8			G2/5000
FVH (80°-90°)	81.7	0.6			G1/100
BL (0°-30°)	478.4	3.3	B1/500		
BM (30°-60°)	810.8	5.7	B1/1000		
BH (60°-80°)	552.7	3.9	B2/1000		G2/1000
BVH (80°-90°)	3.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





REPORT NUMBER: P399680

CATALOG NUMBER: ARCH-L-PA3-170-830-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2209.4	2209.4	2209.4	2209.4	2209.4	2209.4	2209.4	2209.4	2209.4	2209.4	2209.4
2.5°	2247.3	2241.9	2236.5	2233.8	2233.8	2231.1	2220.2	2217.5	2212.1	2206.7	2201.3
5°	2225.6	2217.5	2214.8	2217.5	2220.2	2225.6	2220.2	2220.2	2214.8	2209.4	2198.6
7.5°	2171.5	2166.1	2168.8	2176.9	2179.6	2198.6	2201.3	2209.4	2209.4	2204.0	2195.9
10°	2106.5	2103.8	2103.8	2117.3	2130.9	2157.9	2176.9	2198.6	2201.3	2201.3	2187.7
12.5°	2057.8	2055.1	2063.2	2079.4	2106.5	2141.7	2174.2	2206.7	2212.1	2214.8	2193.1
15°	2028.0	2028.0	2038.8	2071.3	2109.2	2157.9	2195.9	2239.2	2244.6	2241.9	2212.1
17.5°	2000.9	2003.6	2025.3	2079.4	2122.7	2187.7	2233.8	2282.5	2285.2	2282.5	2233.8
20°	1990.1	1995.5	2028.0	2098.4	2147.1	2220.2	2279.8	2328.5	2331.2	2320.4	2255.4
22.5°	2019.9	2022.6	2063.2	2139.0	2185.0	2266.3	2342.1	2388.1	2390.8	2374.6	2287.9
25°	2122.7	2122.7	2157.9	2222.9	2263.5	2344.8	2426.0	2480.2	2480.2	2461.2	2361.0
27.5°	2363.7	2342.1	2333.9	2352.9	2366.4	2453.1	2539.7	2607.4	2604.7	2577.6	2455.8
30°	2829.4	2775.3	2688.6	2591.2	2542.4	2602.0	2683.2	2769.9	2767.2	2723.8	2572.2
32.5°	3611.9	3533.4	3327.6	3070.4	2861.9	2794.2	2870.0	2964.8	2967.5	2916.1	2759.0
35°	4708.5	4583.9	4215.7	3858.3	3381.8	3124.6	3146.2	3249.1	3281.6	3254.5	3073.1
37.5°	5764.5	5650.7	5298.8	4803.3	4156.1	3630.9	3538.8	3628.2	3666.1	3666.1	3473.8
40°	6828.5	6695.9	6384.5	5886.3	5204.0	4421.5	4091.2	4164.3	4204.9	4213.0	3961.2
42.5°	7681.4	7594.8	7356.5	6969.3	6330.3	5807.8	4887.2	4846.6	4884.5	4854.7	4527.1
45°	8271.7	8204.0	8038.8	7892.6	7581.2	7318.6	5951.3	5677.8	5702.2	5599.3	5163.4
47.5°	8393.5	8317.7	8282.5	8485.6	8707.6	8772.6	7259.0	6666.1	6641.7	6414.3	5824.0
50°	7862.8	7871.0	8000.9	8580.4	9506.3	10091.2	8775.3	7781.6	7692.3	7185.9	6438.6
52.5°	6717.5	6847.5	7175.1	8114.6	9750.0	11049.7	10291.5	8964.8	8826.7	7935.9	6898.9
55°	5255.4	5423.3	5962.1	7042.4	9241.0	11477.5	11569.5	10194.1	9880.0	8499.1	7256.3
57.5°	3907.1	3958.5	4586.7	5572.2	8036.1	11057.8	12224.8	11141.7	10738.3	8948.6	7611.0
60°	2434.1	2466.6	3130.0	4242.8	6086.7	9506.3	12224.8	11794.3	11409.8	9352.0	7935.9
62.5°	1513.5	1524.4	1773.5	2908.0	4137.2	7050.6	11718.4	12300.6	11991.9	9641.7	8214.8
65°	871.8	882.7	999.1	1643.5	2691.3	4221.1	10424.2	12449.5	12311.4	9871.9	8431.4
67.5°	636.3	641.7	687.7	923.3	1759.9	2168.8	7830.3	11851.1	12024.4	9985.6	8426.0
70°	552.3	560.5	620.0	720.2	1269.9	1332.1	3985.6	10234.7	10719.3	9823.1	8174.2
72.5°	425.1	435.9	525.3	676.9	931.4	958.5	1443.1	7283.4	8017.2	8807.8	7483.8
75°	292.4	303.2	392.6	557.8	769.0	717.5	793.3	3352.0	4229.3	5908.0	5696.8
77.5°	186.8	189.5	246.4	406.1	663.4	509.0	544.2	1093.9	1535.2	2672.4	2688.6
80°	124.5	127.3	151.6	262.6	454.9	471.1	335.7	506.3	555.1	779.8	541.5
82.5°	75.8	75.8	102.9	165.2	276.2	389.9	219.3	265.3	284.3	300.5	140.8
85°	29.8	29.8	62.3	108.3	173.3	181.4	138.1	154.3	162.5	176.0	65.0
87.5°	8.1	8.1	35.2	59.6	75.8	83.9	83.9	75.8	81.2	100.2	32.5
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: P399680
 CATALOG NUMBER: ARCH-L-PA3-170-830-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2209.4	2209.4	2209.4	2209.4	2209.4	2209.4	2209.4	2209.4	2209.4	2209.4	2209.4
2.5°	2198.6	2190.4	2179.6	2168.8	2157.9	2149.8	2141.7	2141.7	2136.3	2128.2	2122.7
5°	2193.1	2179.6	2155.2	2136.3	2106.5	2084.8	2068.6	2055.1	2046.9	2028.0	2025.3
7.5°	2185.0	2168.8	2133.6	2095.7	2046.9	2009.0	1971.1	1944.0	1917.0	1895.3	1889.9
10°	2171.5	2152.5	2101.1	2046.9	1979.2	1908.9	1819.5	1716.6	1621.8	1567.7	1551.4
12.5°	2171.5	2147.1	2079.4	2006.3	1908.9	1735.6	1508.1	1280.7	1104.7	1026.2	1004.5
15°	2185.0	2152.5	2063.2	1963.0	1781.6	1429.6	1061.4	760.8	568.6	509.0	495.5
17.5°	2198.6	2152.5	2038.8	1903.4	1548.7	1037.0	603.8	400.7	338.4	324.9	324.9
20°	2204.0	2147.1	2006.3	1792.4	1237.4	644.4	360.1	300.5	276.2	268.1	268.1
22.5°	2225.6	2149.8	1982.0	1632.7	898.9	379.1	284.3	251.8	227.4	219.3	219.3
25°	2279.8	2182.3	1987.4	1429.6	576.7	287.0	241.0	208.5	184.1	173.3	173.3
27.5°	2366.4	2255.4	2017.2	1194.0	362.8	246.4	203.1	167.9	148.9	138.1	138.1
30°	2463.9	2336.6	2030.7	923.3	270.8	208.5	165.2	132.7	119.1	111.0	108.3
32.5°	2634.5	2477.4	2019.9	633.6	222.0	176.0	132.7	105.6	94.8	92.1	92.1
35°	2908.0	2723.8	1998.2	398.0	184.1	140.8	105.6	86.6	78.5	75.8	73.1
37.5°	3278.9	3083.9	1933.2	262.6	151.6	111.0	86.6	73.1	65.0	62.3	62.3
40°	3731.1	3495.5	1808.7	200.4	130.0	89.4	73.1	62.3	56.9	54.2	54.2
42.5°	4248.2	3953.1	1611.0	173.3	108.3	75.8	62.3	51.4	48.7	46.0	46.0
45°	4814.1	4432.3	1337.5	154.3	92.1	62.3	51.4	46.0	40.6	40.6	37.9
47.5°	5415.2	4914.3	1028.9	135.4	78.5	54.2	46.0	37.9	35.2	32.5	32.5
50°	5994.6	5344.8	722.9	116.4	65.0	46.0	37.9	32.5	29.8	27.1	27.1
52.5°	6403.4	5604.7	511.7	100.2	54.2	40.6	29.8	24.4	21.7	21.7	21.7
55°	6731.1	5767.2	357.4	83.9	46.0	35.2	24.4	19.0	19.0	16.2	16.2
57.5°	7039.7	5872.8	262.6	70.4	37.9	27.1	19.0	13.5	13.5	10.8	10.8
60°	7359.2	5929.6	200.4	56.9	32.5	21.7	13.5	10.8	8.1	8.1	8.1
62.5°	7681.4	5964.8	154.3	46.0	27.1	16.2	10.8	8.1	5.4	2.7	2.7
65°	7963.0	5975.6	119.1	35.2	21.7	10.8	8.1	2.7	0.0	0.0	0.0
67.5°	8047.0	5851.1	92.1	27.1	16.2	8.1	5.4	0.0	0.0	0.0	0.0
70°	7819.5	5520.8	70.4	21.7	13.5	5.4	2.7	0.0	0.0	0.0	0.0
72.5°	6939.6	4630.0	54.2	13.5	10.8	5.4	2.7	0.0	0.0	0.0	0.0
75°	4965.7	2469.3	37.9	10.8	8.1	2.7	0.0	0.0	0.0	0.0	0.0
77.5°	2285.2	955.8	27.1	8.1	5.4	2.7	0.0	0.0	0.0	0.0	0.0
80°	446.8	238.3	10.8	5.4	2.7	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	102.9	40.6	5.4	5.4	2.7	0.0	0.0	0.0	0.0	0.0	0.0
85°	35.2	13.5	2.7	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	13.5	5.4	2.7	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)