

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: P399671

Luminaire Tested: **ARCH-L-PA3-170-827-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399671
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-PA3-170-827-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 2700K, 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: 13267 lumens
Efficiency: N/A
Efficacy: 76.7 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

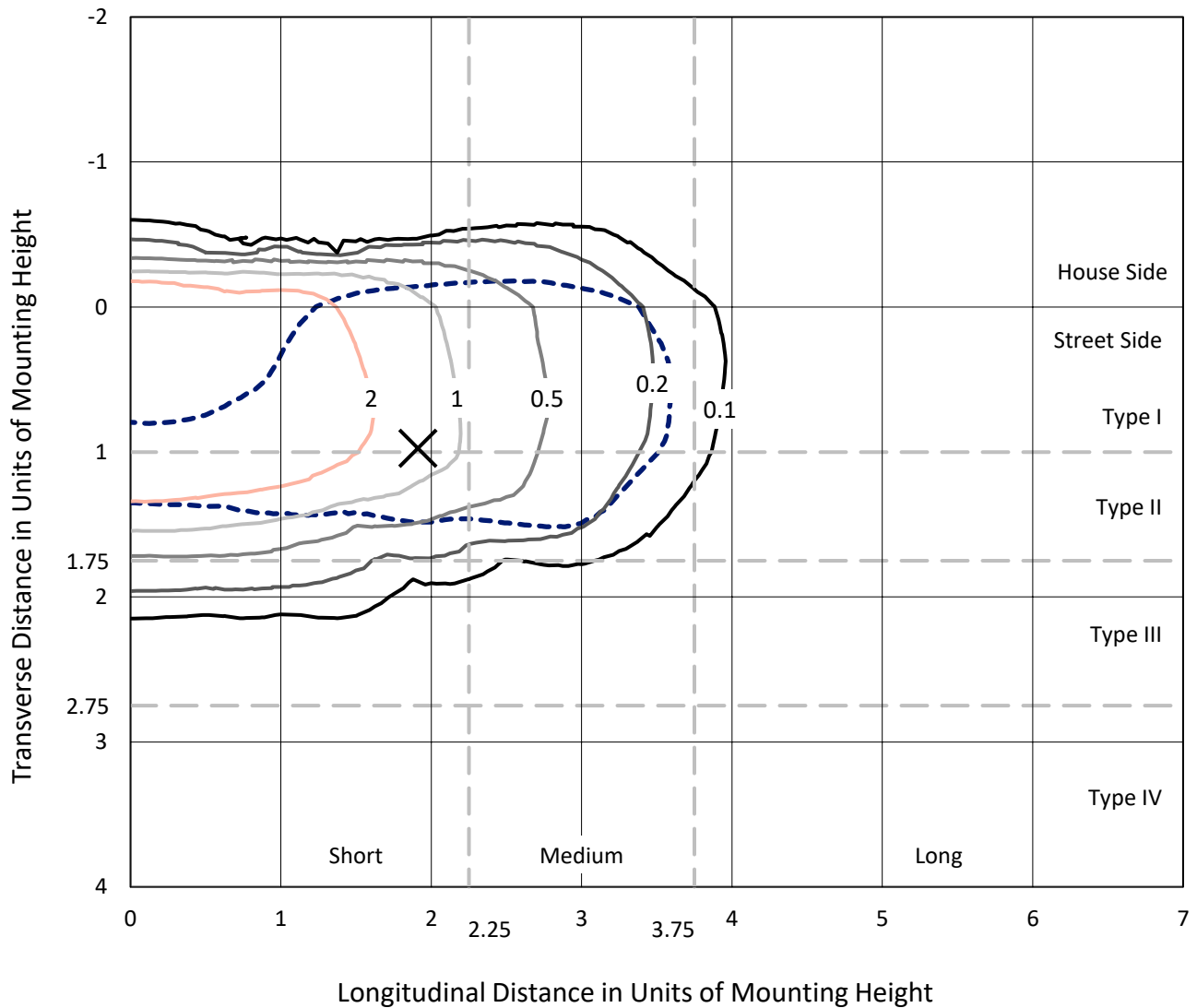
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P399671
 CATALOG NUMBER: ARCH-L-PA3-170-827-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

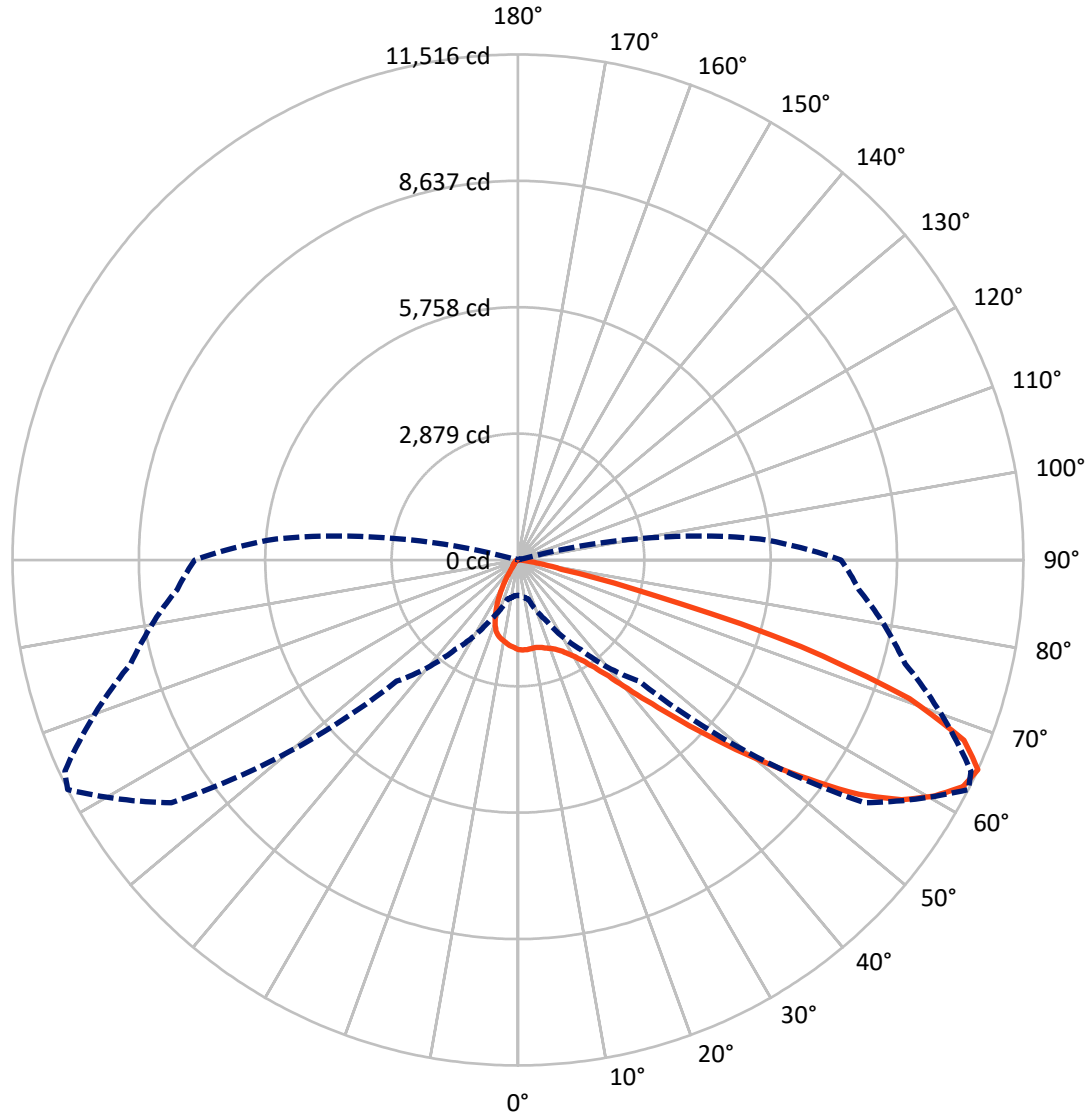
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type II - Short - N/A

REPORT NUMBER: P399671
CATALOG NUMBER: ARCH-L-PA3-170-827-U-T2U-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P399671
 CATALOG NUMBER: ARCH-L-PA3-170-827-U-T2U-HSS

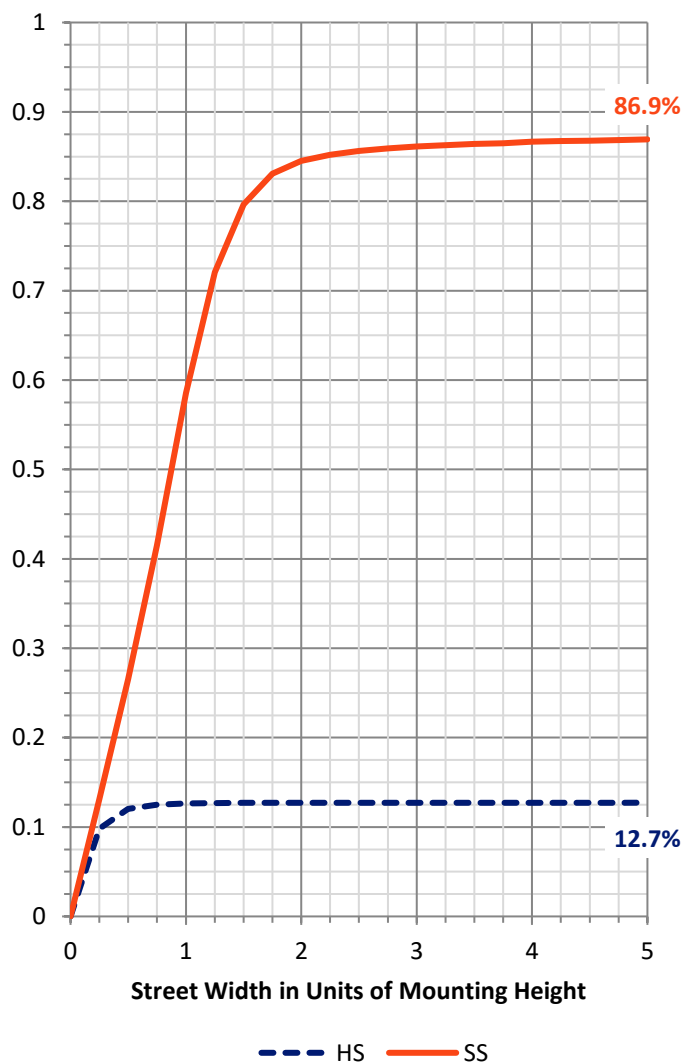
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1707.4	0.0	1707.4
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	11559.6	0.0	11559.6
	% Fixture	87.1	0.0	87.1
Total	Lumens	13267.0	0.0	13267.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.5	1.4
10°-20°	460.0	3.5
20°-30°	681.9	5.1
30°-40°	1266.1	9.5
40°-50°	2682.1	20.2
50°-60°	3708.7	28.0
60°-70°	2968.9	22.4
70°-80°	1233.5	9.3
80°-90°	79.2	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°	13267.0	100.0
0°-180°	13267.0	100.0

Coefficient of Utilization

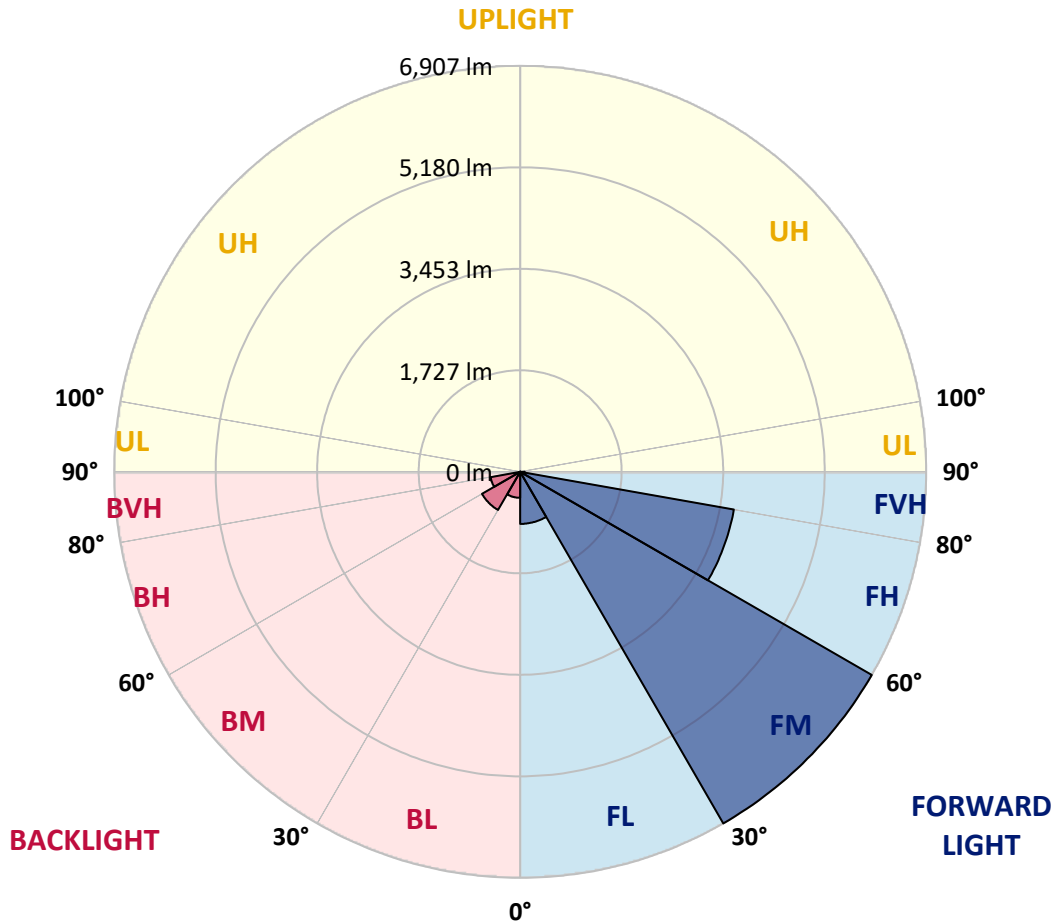


REPORT NUMBER: P399671
 CATALOG NUMBER: ARCH-L-PA3-170-827-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	885.9	6.7			
FM (30°-60°)	6906.9	52.1			
FH (60°-80°)	3691.2	27.8			G2/5000
FVH (80°-90°)	75.6	0.6			G1/100
BL (0°-30°)	442.5	3.3	B1/500		
BM (30°-60°)	750.1	5.7	B1/1000		
BH (60°-80°)	511.3	3.9	B2/1000		G2/1000
BVH (80°-90°)	3.6	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: P399671

CATALOG NUMBER: ARCH-L-PA3-170-827-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2043.8	2043.8	2043.8	2043.8	2043.8	2043.8	2043.8	2043.8	2043.8	2043.8	2043.8
2.5°	2078.9	2073.8	2068.8	2066.3	2066.3	2063.8	2053.8	2051.3	2046.3	2041.3	2036.3
5°	2058.8	2051.3	2048.8	2051.3	2053.8	2058.8	2053.8	2053.8	2048.8	2043.8	2033.8
7.5°	2008.7	2003.7	2006.2	2013.7	2016.2	2033.8	2036.3	2043.8	2043.8	2038.8	2031.3
10°	1948.6	1946.1	1946.1	1958.6	1971.2	1996.2	2013.7	2033.8	2036.3	2036.3	2023.8
12.5°	1903.5	1901.0	1908.5	1923.6	1948.6	1981.2	2011.2	2041.3	2046.3	2048.8	2028.8
15°	1876.0	1876.0	1886.0	1916.1	1951.1	1996.2	2031.3	2071.3	2076.3	2073.8	2046.3
17.5°	1850.9	1853.4	1873.5	1923.6	1963.6	2023.8	2066.3	2111.4	2113.9	2111.4	2066.3
20°	1840.9	1845.9	1876.0	1941.1	1986.2	2053.8	2108.9	2154.0	2156.5	2146.5	2086.4
22.5°	1868.5	1871.0	1908.5	1978.7	2021.2	2096.4	2166.5	2209.1	2211.6	2196.6	2116.4
25°	1963.6	1963.6	1996.2	2056.3	2093.9	2169.0	2244.2	2294.3	2294.3	2276.7	2184.0
27.5°	2186.6	2166.5	2159.0	2176.5	2189.1	2269.2	2349.4	2412.0	2409.5	2384.4	2271.7
30°	2617.4	2567.3	2487.1	2396.9	2351.9	2407.0	2482.1	2562.2	2559.7	2519.7	2379.4
32.5°	3341.2	3268.6	3078.2	2840.3	2647.4	2584.8	2654.9	2742.6	2745.1	2697.5	2552.2
35°	4355.6	4240.4	3899.7	3569.1	3128.3	2890.4	2910.4	3005.6	3035.6	3010.6	2842.8
37.5°	5332.4	5227.2	4901.6	4443.2	3844.6	3358.7	3273.6	3356.2	3391.3	3391.3	3213.5
40°	6316.7	6194.0	5905.9	5445.1	4813.9	4090.1	3784.5	3852.1	3889.7	3897.2	3664.3
42.5°	7105.7	7025.5	6805.1	6447.0	5855.9	5372.5	4520.9	4483.3	4518.4	4490.8	4187.8
45°	7651.7	7589.1	7436.3	7301.0	7013.0	6770.0	5505.2	5252.2	5274.8	5179.6	4776.4
47.5°	7764.4	7694.3	7661.7	7849.6	8054.9	8115.0	6714.9	6166.4	6143.9	5933.5	5387.5
50°	7273.5	7281.0	7401.2	7937.2	8793.8	9334.8	8117.5	7198.3	7115.7	6647.3	5956.0
52.5°	6214.0	6334.2	6637.3	7506.4	9019.2	10221.4	9520.1	8292.9	8165.1	7341.1	6381.8
55°	4861.5	5016.8	5515.2	6514.6	8548.3	10617.2	10702.3	9430.0	9139.4	7862.1	6712.4
57.5°	3614.2	3661.8	4242.9	5154.6	7433.8	10229.0	11308.5	10306.6	9933.4	8277.8	7040.6
60°	2251.7	2281.7	2895.4	3924.8	5630.4	8793.8	11308.5	10910.2	10554.6	8651.0	7341.1
62.5°	1400.1	1410.1	1640.5	2690.0	3827.1	6522.1	10840.1	11378.6	11093.1	8919.0	7599.1
65°	806.5	816.5	924.2	1520.3	2489.6	3904.7	9642.9	11516.3	11388.6	9131.9	7799.5
67.5°	588.6	593.6	636.2	854.1	1628.0	2006.2	7243.4	10962.8	11123.1	9237.1	7794.4
70°	510.9	518.5	573.6	666.2	1174.7	1232.3	3686.8	9467.5	9915.9	9086.8	7561.5
72.5°	393.2	403.2	485.9	626.2	861.6	886.6	1335.0	6737.5	7416.2	8147.6	6922.8
75°	270.5	280.5	363.2	516.0	711.3	663.7	733.9	3100.7	3912.3	5465.1	5269.8
77.5°	172.8	175.3	227.9	375.7	613.6	470.9	503.4	1011.9	1420.1	2472.1	2487.1
80°	115.2	117.7	140.3	243.0	420.8	435.8	310.6	468.4	513.5	721.3	500.9
82.5°	70.1	70.1	95.2	152.8	255.5	360.7	202.9	245.5	263.0	278.0	130.2
85°	27.6	27.6	57.6	100.2	160.3	167.8	127.7	142.8	150.3	162.8	60.1
87.5°	7.5	7.5	32.6	55.1	70.1	77.6	77.6	70.1	75.1	92.7	30.1
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: P399671

CATALOG NUMBER: ARCH-L-PA3-170-827-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2043.8	2043.8	2043.8	2043.8	2043.8	2043.8	2043.8	2043.8	2043.8	2043.8	2043.8
2.5°	2033.8	2026.3	2016.2	2006.2	1996.2	1988.7	1981.2	1981.2	1976.2	1968.6	1963.6
5°	2028.8	2016.2	1993.7	1976.2	1948.6	1928.6	1913.5	1901.0	1893.5	1876.0	1873.5
7.5°	2021.2	2006.2	1973.7	1938.6	1893.5	1858.4	1823.4	1798.3	1773.3	1753.2	1748.2
10°	2008.7	1991.2	1943.6	1893.5	1830.9	1765.8	1683.1	1587.9	1500.3	1450.2	1435.2
12.5°	2008.7	1986.2	1923.6	1855.9	1765.8	1605.5	1395.1	1184.7	1021.9	949.3	929.2
15°	2021.2	1991.2	1908.5	1815.9	1648.1	1322.5	981.8	703.8	526.0	470.9	458.3
17.5°	2033.8	1991.2	1886.0	1760.8	1432.7	959.3	558.5	370.7	313.1	300.6	300.6
20°	2038.8	1986.2	1855.9	1658.1	1144.6	596.1	333.1	278.0	255.5	248.0	248.0
22.5°	2058.8	1988.7	1833.4	1510.3	831.5	350.6	263.0	232.9	210.4	202.9	202.9
25°	2108.9	2018.7	1838.4	1322.5	533.5	265.5	222.9	192.9	170.3	160.3	160.3
27.5°	2189.1	2086.4	1866.0	1104.5	335.6	227.9	187.8	155.3	137.8	127.7	127.7
30°	2279.2	2161.5	1878.5	854.1	250.5	192.9	152.8	122.7	110.2	102.7	100.2
32.5°	2437.0	2291.7	1868.5	586.1	205.4	162.8	122.7	97.7	87.7	85.2	85.2
35°	2690.0	2519.7	1848.4	368.2	170.3	130.2	97.7	80.1	72.6	70.1	67.6
37.5°	3033.1	2852.8	1788.3	243.0	140.3	102.7	80.1	67.6	60.1	57.6	57.6
40°	3451.4	3233.5	1673.1	185.3	120.2	82.7	67.6	57.6	52.6	50.1	50.1
42.5°	3929.8	3656.8	1490.3	160.3	100.2	70.1	57.6	47.6	45.1	42.6	42.6
45°	4453.3	4100.1	1237.3	142.8	85.2	57.6	47.6	42.6	37.6	37.6	35.1
47.5°	5009.3	4545.9	951.8	125.2	72.6	50.1	42.6	35.1	32.6	30.1	30.1
50°	5545.3	4944.2	668.7	107.7	60.1	42.6	35.1	30.1	27.6	25.0	25.0
52.5°	5923.5	5184.6	473.4	92.7	50.1	37.6	27.6	22.5	20.0	20.0	20.0
55°	6226.5	5334.9	330.6	77.6	42.6	32.6	22.5	17.5	17.5	15.0	15.0
57.5°	6512.1	5432.6	243.0	65.1	35.1	25.0	17.5	12.5	12.5	10.0	10.0
60°	6807.6	5485.2	185.3	52.6	30.1	20.0	12.5	10.0	7.5	7.5	7.5
62.5°	7105.7	5517.7	142.8	42.6	25.0	15.0	10.0	7.5	5.0	2.5	2.5
65°	7366.2	5527.7	110.2	32.6	20.0	10.0	7.5	2.5	0.0	0.0	0.0
67.5°	7443.8	5412.5	85.2	25.0	15.0	7.5	5.0	0.0	0.0	0.0	0.0
70°	7233.4	5107.0	65.1	20.0	12.5	5.0	2.5	0.0	0.0	0.0	0.0
72.5°	6419.4	4282.9	50.1	12.5	10.0	5.0	2.5	0.0	0.0	0.0	0.0
75°	4593.5	2284.2	35.1	10.0	7.5	2.5	0.0	0.0	0.0	0.0	0.0
77.5°	2113.9	884.1	25.0	7.5	5.0	2.5	0.0	0.0	0.0	0.0	0.0
80°	413.3	220.4	10.0	5.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	95.2	37.6	5.0	5.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
85°	32.6	12.5	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	12.5	5.0	2.5	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)