

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: P237189

Luminaire Tested: **ARCH-L-AF72-160-D-U-T3-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237189
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-160-D-U-T3-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14813.4 lumens
Efficiency: N/A
Efficacy: 91.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G3

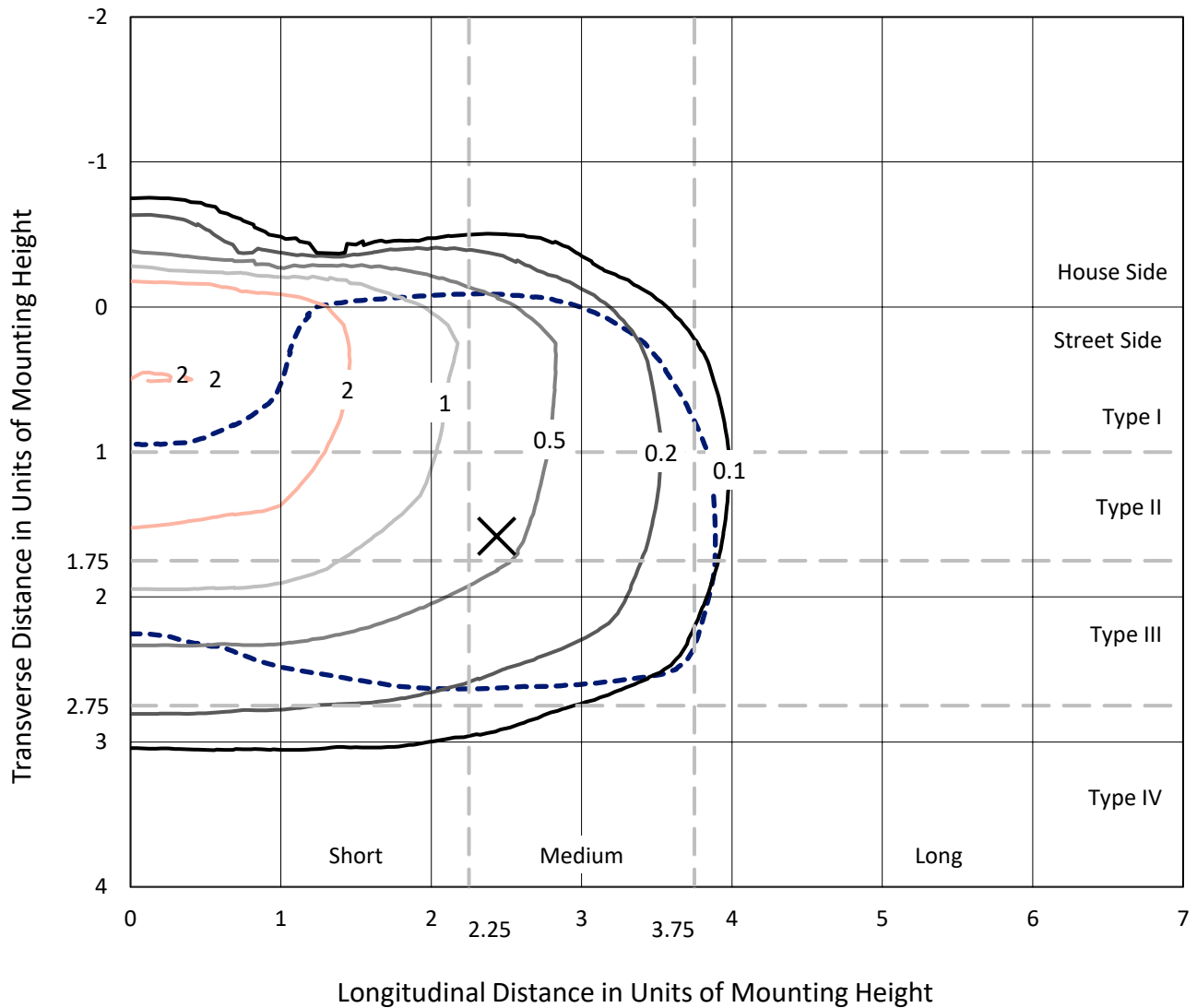
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P237189
 CATALOG NUMBER: ARCH-L-AF72-160-D-U-T3-7030-HSS

Iso-Footcandle Lines of Horizontal Illumination

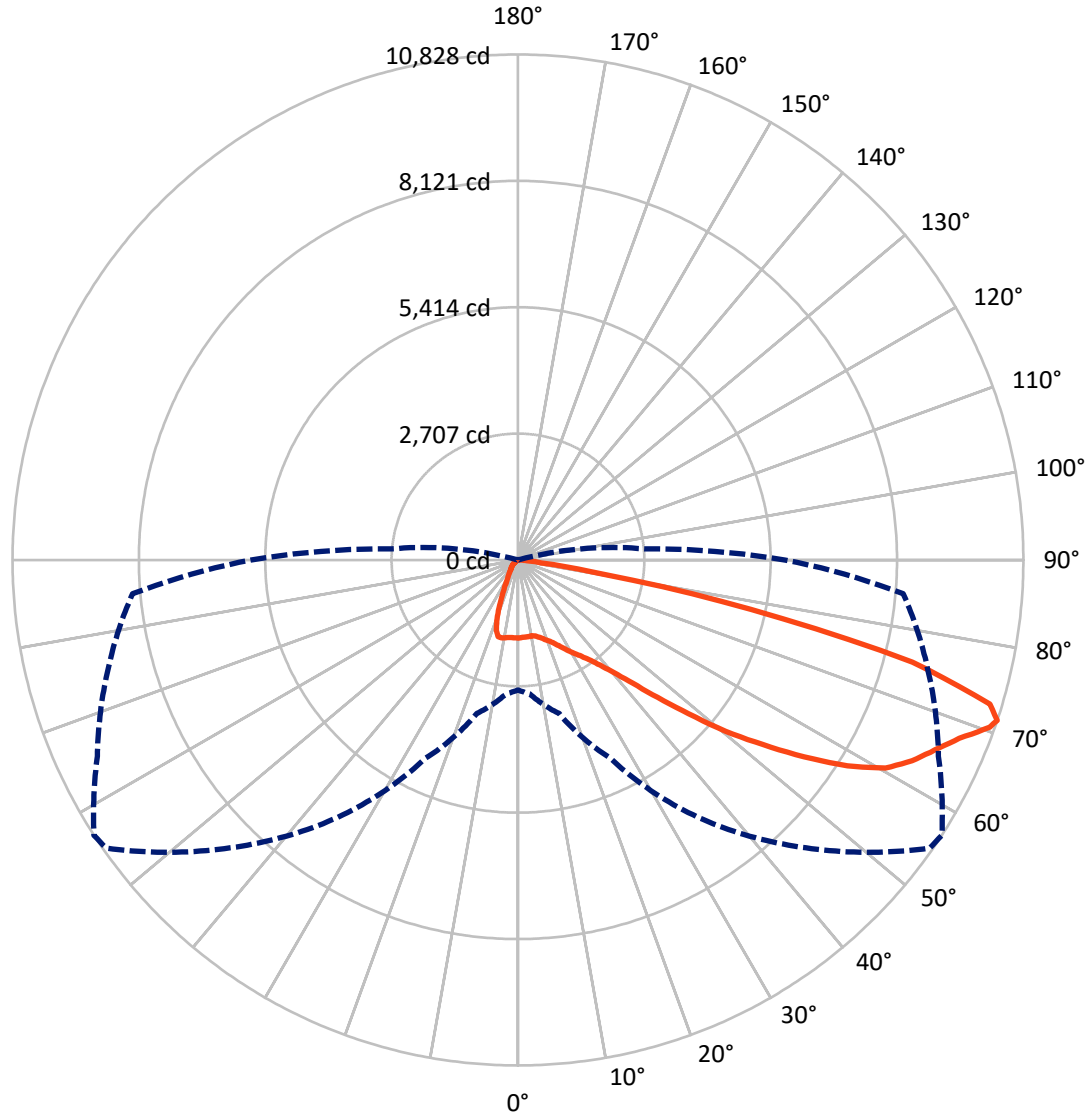
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type III - Medium - N/A

REPORT NUMBER: P237189
CATALOG NUMBER: ARCH-L-AF72-160-D-U-T3-7030-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

REPORT NUMBER: P237189
 CATALOG NUMBER: ARCH-L-AF72-160-D-U-T3-7030-HSS

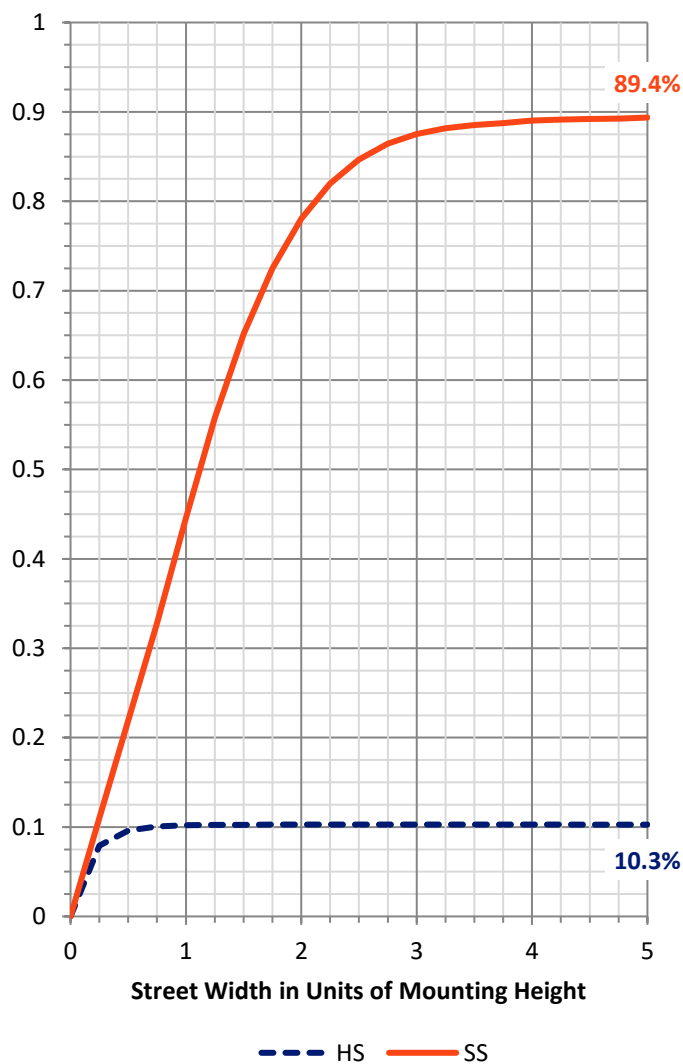
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1535.1	0.0	1535.1
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	13278.2	0.0	13278.2
	% Fixture	89.6	0.0	89.6
Total	Lumens	14813.4	0.0	14813.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.2	1.1
10°-20°	420.4	2.8
20°-30°	655.8	4.4
30°-40°	1108.4	7.5
40°-50°	2152.8	14.5
50°-60°	3615.2	24.4
60°-70°	4314.4	29.1
70°-80°	2273.7	15.3
80°-90°	115.5	0.8
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°	14813.4	100.0
0°-180°	14813.4	100.0

Coefficient of Utilization



REPORT NUMBER: P237189

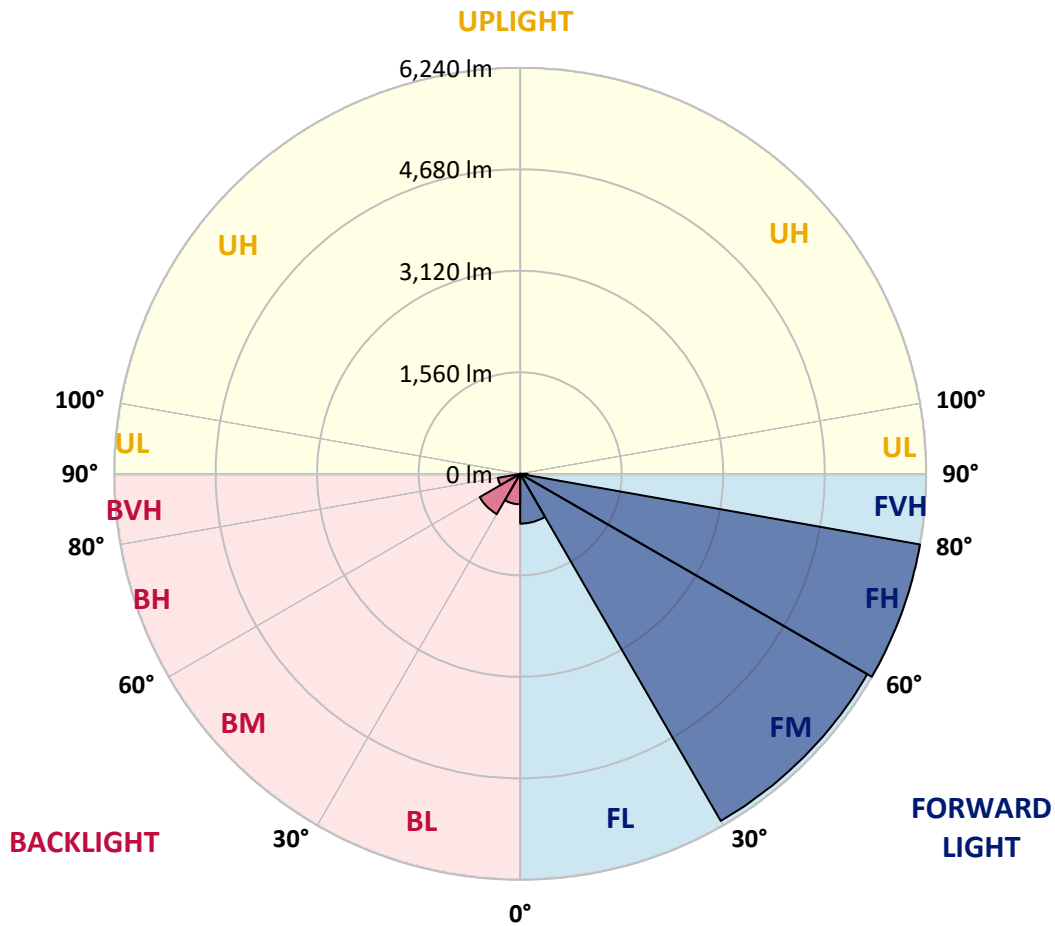
CATALOG NUMBER: ARCH-L-AF72-160-D-U-T3-7030-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	764.8	5.2			
FM (30°-60°)	6159.5	41.6			
FH (60°-80°)	6239.5	42.1			G3/7500
FVH (80°-90°)	114.4	0.8			G2/225
BL (0°-30°)	468.6	3.2	B1/500		
BM (30°-60°)	716.8	4.8	B1/1000		
BH (60°-80°)	348.6	2.4	B1/500		G1/500
BVH (80°-90°)	1.1	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 III Medium





REPORT NUMBER: P237189

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T3-7030-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1674.2	1674.2	1674.2	1674.2	1674.2	1674.2	1674.2	1674.2	1674.2	1674.2	1674.2
2.5°	1650.0	1650.0	1650.0	1653.4	1656.9	1656.9	1663.8	1660.3	1660.3	1660.3	1667.2
5°	1605.1	1608.6	1612.0	1618.9	1632.7	1643.0	1660.3	1660.3	1663.8	1670.7	1674.2
7.5°	1543.0	1546.4	1556.7	1570.6	1598.3	1622.4	1650.0	1656.9	1667.2	1684.4	1691.5
10°	1505.0	1511.9	1525.7	1543.0	1574.0	1605.1	1639.7	1650.0	1681.1	1712.1	1729.3
12.5°	1494.6	1498.1	1511.9	1539.5	1577.4	1615.5	1660.3	1670.7	1715.6	1763.9	1791.6
15°	1511.9	1515.3	1522.3	1553.3	1598.3	1646.5	1705.2	1718.9	1774.3	1829.4	1864.0
17.5°	1543.0	1543.0	1549.9	1577.4	1625.8	1681.1	1757.0	1777.6	1839.8	1901.9	1939.9
20°	1563.7	1563.7	1574.0	1601.6	1656.9	1729.3	1819.1	1846.7	1915.8	1984.8	2019.3
22.5°	1584.4	1587.9	1598.3	1629.3	1691.5	1791.6	1895.1	1922.6	2002.0	2074.5	2109.0
25°	1643.0	1639.7	1643.0	1670.7	1743.1	1867.5	1998.6	2033.1	2116.0	2195.3	2212.6
27.5°	1805.3	1798.4	1753.5	1736.2	1791.6	1946.8	2129.8	2164.3	2260.9	2340.4	2340.4
30°	2178.1	2164.3	2053.8	1912.4	1867.5	2019.3	2254.0	2302.4	2426.6	2495.7	2474.9
32.5°	2650.9	2619.9	2478.4	2236.7	2057.3	2116.0	2385.2	2440.5	2599.3	2658.0	2613.1
35°	3168.7	3165.3	2989.4	2678.6	2423.2	2316.2	2554.4	2619.9	2820.1	2871.9	2799.4
37.5°	3717.6	3731.4	3614.1	3186.0	2885.7	2644.1	2778.7	2854.6	3099.6	3161.9	3092.8
40°	4328.7	4325.1	4280.2	3772.8	3441.4	3110.1	3103.2	3172.3	3469.1	3565.7	3469.1
42.5°	5101.8	5094.9	4932.6	4477.0	4114.6	3717.6	3576.0	3600.2	3931.5	4090.4	3948.8
45°	5888.8	5840.5	5654.0	5260.7	4939.6	4470.2	4200.9	4200.9	4483.9	4701.4	4480.5
47.5°	6327.2	6278.9	6202.9	5985.4	5888.8	5364.1	4967.2	4918.9	5139.8	5360.7	5050.1
50°	6903.6	6903.6	6713.8	6631.0	6796.7	6427.2	5812.9	5764.5	5871.6	6047.6	5640.3
52.5°	7359.2	7276.4	7141.8	7214.3	7687.3	7518.1	6658.6	6565.4	6648.2	6693.1	6154.6
55°	7549.2	7469.7	7459.3	7725.1	8457.0	8222.2	7525.0	7442.0	7435.2	7214.3	6603.3
57.5°	7587.1	7518.1	7649.2	8115.2	9205.9	8798.7	8388.0	8325.8	8132.5	7580.2	7062.4
60°	7266.1	7300.6	7618.2	8329.3	9647.8	9299.2	9116.3	9050.7	8605.4	7890.9	7573.3
62.5°	6606.8	6689.6	7283.3	8349.9	9485.7	9502.9	9520.1	9475.3	8971.3	8173.9	8087.6
65°	5826.7	5850.9	6565.4	8063.5	9202.6	9440.8	9817.0	9813.5	9250.9	8491.5	8667.5
67.5°	4801.5	4842.9	5460.8	7096.9	8636.5	9413.1	10207.0	10196.7	9568.5	8854.0	9012.7
70°	3572.7	3624.4	4125.0	5519.4	7373.2	9068.0	10717.9	10724.8	9903.3	9130.0	8774.5
71°	2785.7	2878.9	3403.5	4687.6	6727.6	8719.3	10766.3	10828.3	9941.3	9092.1	8284.4
72.5°	1367.0	1477.4	2136.7	3299.9	5536.7	7939.3	10448.7	10569.5	9703.1	8619.3	7083.2
75°	355.5	376.3	638.6	1349.7	2968.6	5260.7	8425.8	8733.1	7932.3	6561.9	4328.7
77.5°	224.4	231.3	300.4	524.7	1111.5	1998.6	4949.9	5101.8	4532.3	3324.1	1525.7
80°	158.8	162.2	189.9	338.2	648.9	583.3	1781.2	1846.7	1639.7	880.2	272.7
82.5°	96.7	96.7	138.1	217.4	400.4	317.6	469.5	500.5	441.9	245.1	89.7
85°	55.1	58.7	86.4	148.4	189.9	155.3	176.0	186.4	189.9	162.2	38.0
87.5°	44.9	48.3	75.9	124.2	103.6	75.9	75.9	79.4	82.8	96.7	17.3
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: P237189

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T3-7030-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1674.2	1674.2	1674.2	1674.2	1674.2	1674.2	1674.2	1674.2	1674.2	1674.2	1674.2
2.5°	1667.2	1667.2	1670.7	1667.2	1667.2	1667.2	1670.7	1670.7	1670.7	1677.5	1681.1
5°	1674.2	1674.2	1674.2	1670.7	1667.2	1667.2	1674.2	1677.5	1677.5	1687.9	1687.9
7.5°	1691.5	1691.5	1684.4	1677.5	1670.7	1660.3	1663.8	1667.2	1663.8	1667.2	1667.2
10°	1729.3	1729.3	1718.9	1705.2	1684.4	1653.4	1612.0	1560.2	1511.9	1494.6	1487.8
12.5°	1791.6	1788.0	1767.4	1743.1	1698.3	1591.3	1436.0	1252.9	1101.2	1059.7	1045.9
15°	1860.5	1853.6	1829.4	1788.0	1667.2	1384.2	1059.7	825.0	680.0	645.5	638.6
17.5°	1933.1	1922.6	1888.1	1805.3	1525.7	1028.6	683.4	517.8	438.3	431.5	435.0
20°	2009.0	1995.2	1946.8	1770.8	1232.3	686.9	441.9	400.4	393.6	393.6	396.9
22.5°	2095.3	2078.0	2012.4	1646.5	897.4	455.6	379.6	376.3	372.8	369.3	369.3
25°	2195.3	2174.7	2074.5	1422.1	617.9	372.8	362.4	352.1	345.2	338.2	334.9
27.5°	2316.2	2288.6	2122.9	1146.0	424.6	348.6	341.8	324.5	310.7	296.8	296.8
30°	2437.0	2402.5	2109.0	862.9	345.2	324.5	310.7	290.0	269.3	255.4	252.0
32.5°	2564.8	2530.2	2019.3	579.9	314.1	296.8	279.6	248.6	224.4	207.1	203.7
35°	2754.5	2726.9	1843.3	383.2	283.1	262.3	238.1	207.1	176.0	158.8	155.3
37.5°	3037.6	3003.1	1625.8	293.4	248.6	217.4	196.7	162.2	131.2	113.9	110.5
40°	3417.3	3313.8	1367.0	258.8	217.4	179.5	151.9	117.4	93.2	82.8	82.8
42.5°	3859.1	3614.1	1087.3	234.7	193.3	148.4	110.5	79.4	65.5	62.2	62.2
45°	4328.7	3893.7	807.8	217.4	169.2	117.4	79.4	55.1	48.3	44.9	44.9
47.5°	4811.9	4121.5	562.6	196.7	141.5	89.7	55.1	41.4	34.5	31.0	31.0
50°	5264.0	4270.0	396.9	176.0	120.8	65.5	41.4	31.0	24.1	24.1	24.1
52.5°	5578.1	4256.0	286.5	151.9	93.2	44.9	27.7	20.8	20.8	20.8	20.8
55°	5854.3	4204.3	224.4	131.2	72.4	31.0	20.8	17.3	17.3	13.7	13.7
57.5°	6089.0	4121.5	189.9	107.0	51.8	24.1	13.7	13.7	10.4	10.4	10.4
60°	6289.2	4017.9	158.8	89.7	34.5	17.3	10.4	6.9	6.9	3.5	6.9
62.5°	6561.9	3952.4	138.1	69.1	24.1	10.4	6.9	3.5	3.5	0.0	0.0
65°	6762.2	3828.1	117.4	48.3	13.7	6.9	3.5	3.5	0.0	0.0	0.0
67.5°	6769.0	3603.7	86.4	27.7	10.4	6.9	3.5	0.0	0.0	0.0	0.0
70°	6223.6	3072.2	55.1	13.7	6.9	3.5	3.5	0.0	0.0	0.0	0.0
71°	5723.1	2720.0	44.9	10.4	6.9	3.5	0.0	0.0	0.0	0.0	0.0
72.5°	4715.2	1998.6	34.5	10.4	3.5	3.5	0.0	0.0	0.0	0.0	0.0
75°	2599.3	724.9	17.3	6.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	831.9	220.9	10.4	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	141.5	34.5	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	48.3	13.7	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.7	6.9	0.0	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)