

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: P257674

Luminaire Tested: **ARCH-AF16-30-D-U-T2U-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257674
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF16-30-D-U-T2U-7030-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 560mA LIGHT ENGINE WITH 16 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2490 lumens
Efficiency: N/A
Efficacy: 77.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 32
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

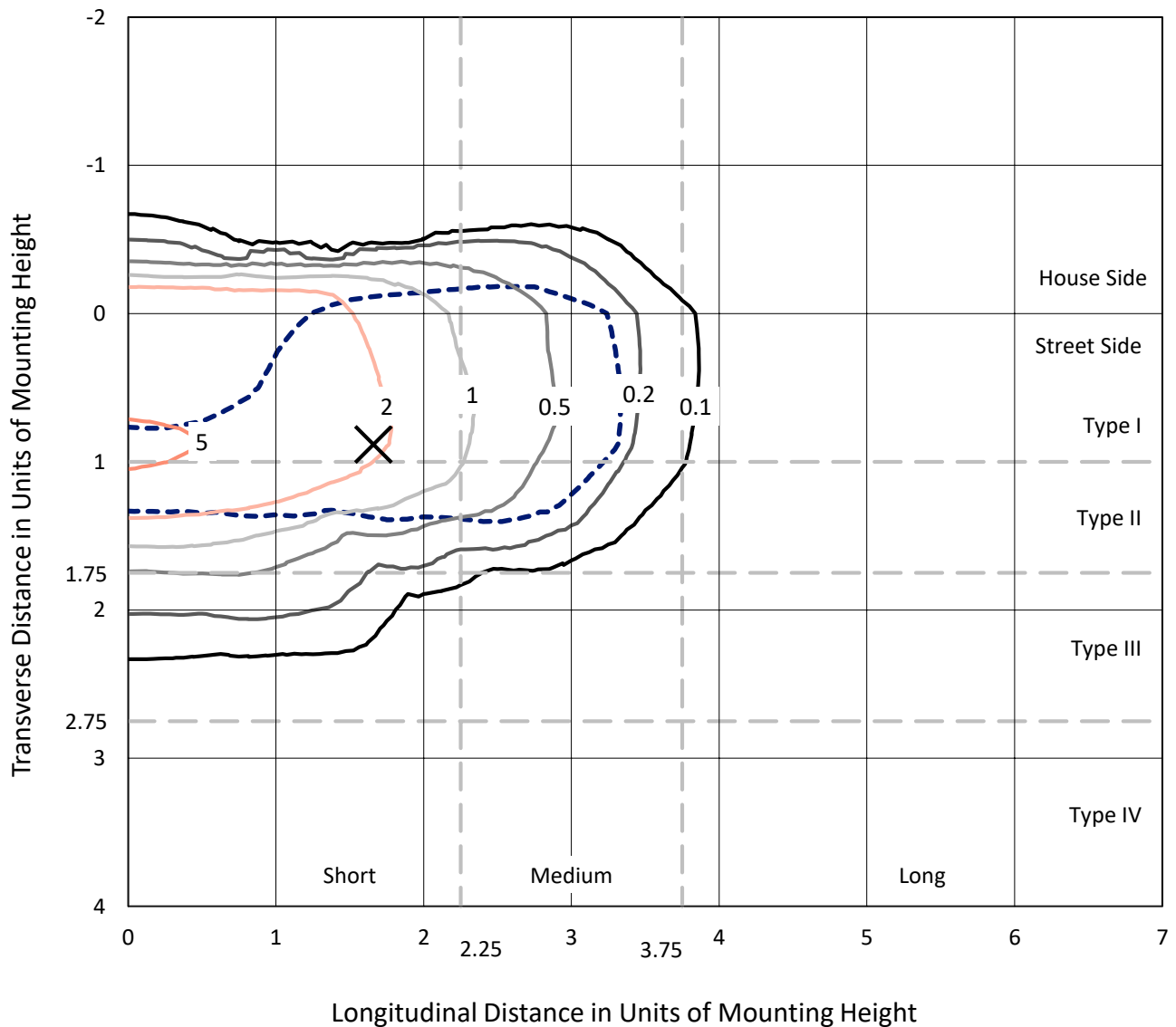


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

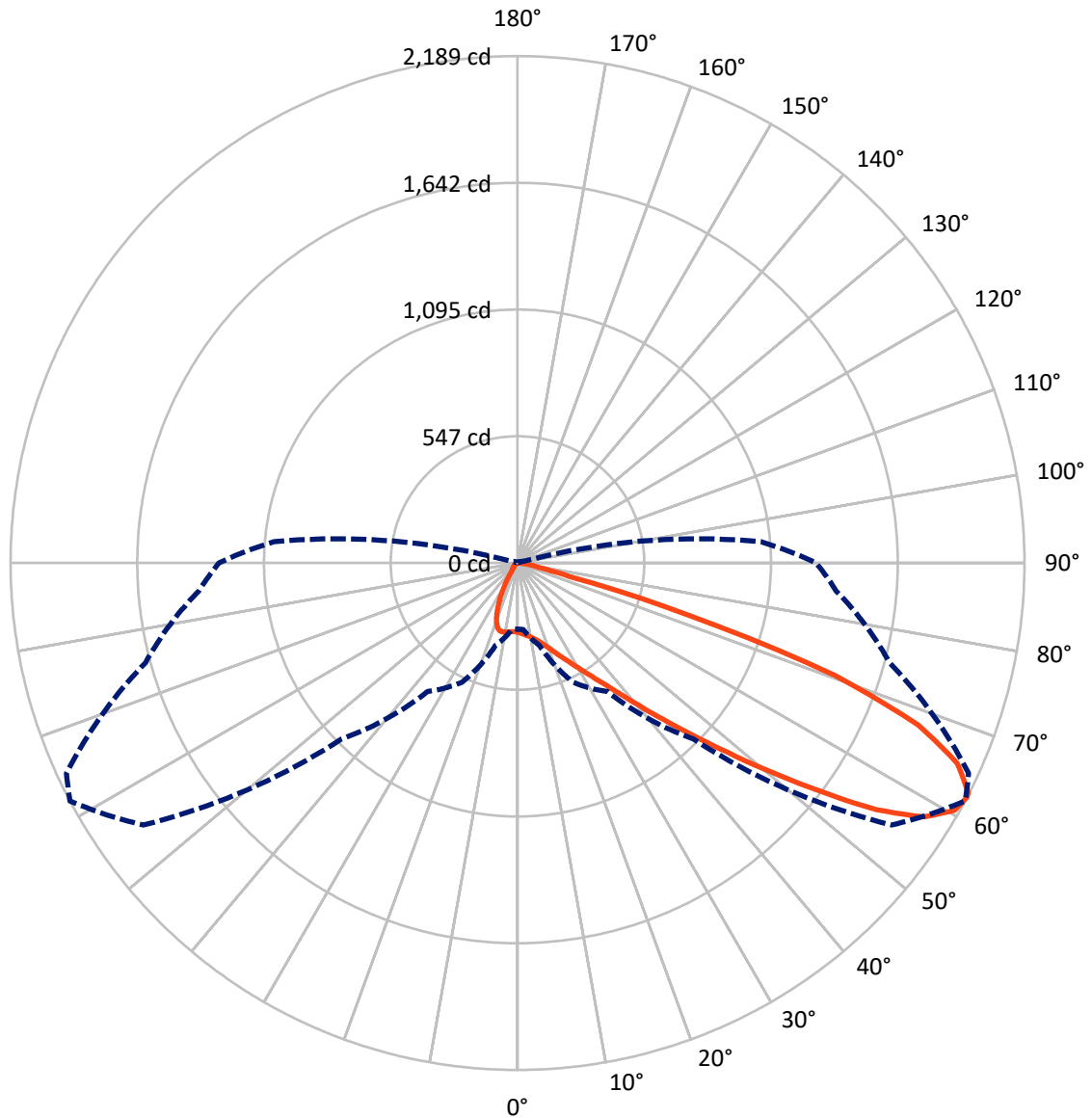


Based on 10 foot mounting height. Maximum calculated value = 5.7 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

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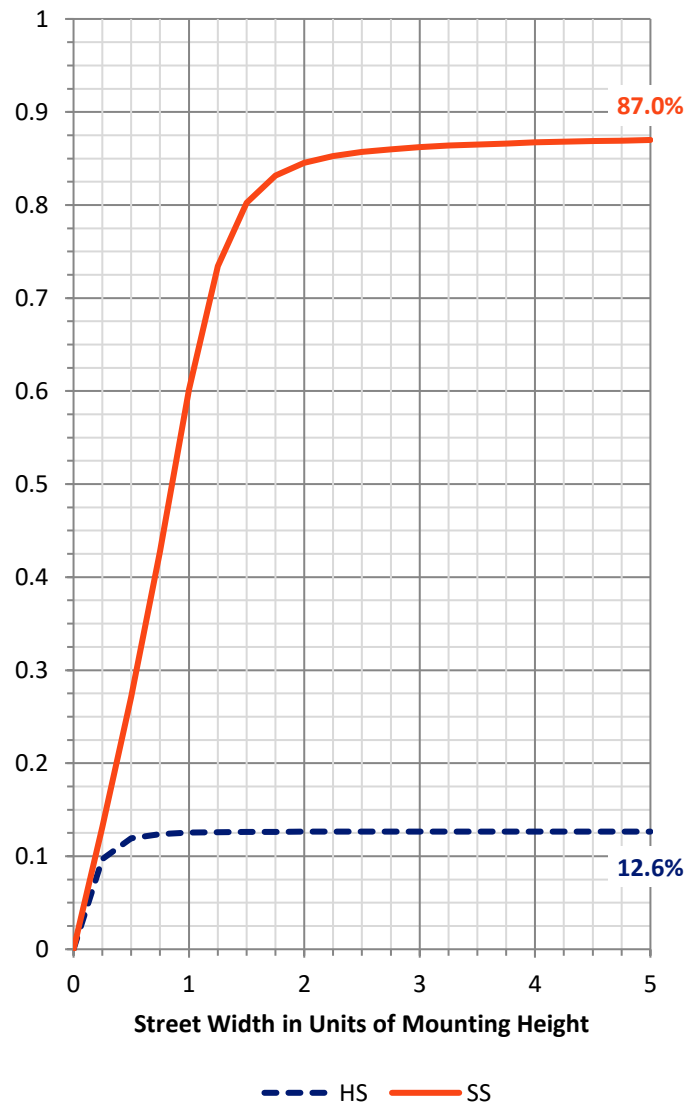
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	318.4	0.0	318.4
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	2171.6	0.0	2171.6
	% Fixture	87.2	0.0	87.2
Total	Lumens	2490.0	0.0	2490.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.9	1.2
10°-20°	80.6	3.2
20°-30°	135.4	5.4
30°-40°	259.5	10.4
40°-50°	530.1	21.3
50°-60°	701.5	28.2
60°-70°	544.9	21.9
70°-80°	196.7	7.9
80°-90°	12.5	0.5
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°	2490.0	100.0
0°-180°	2490.0	100.0



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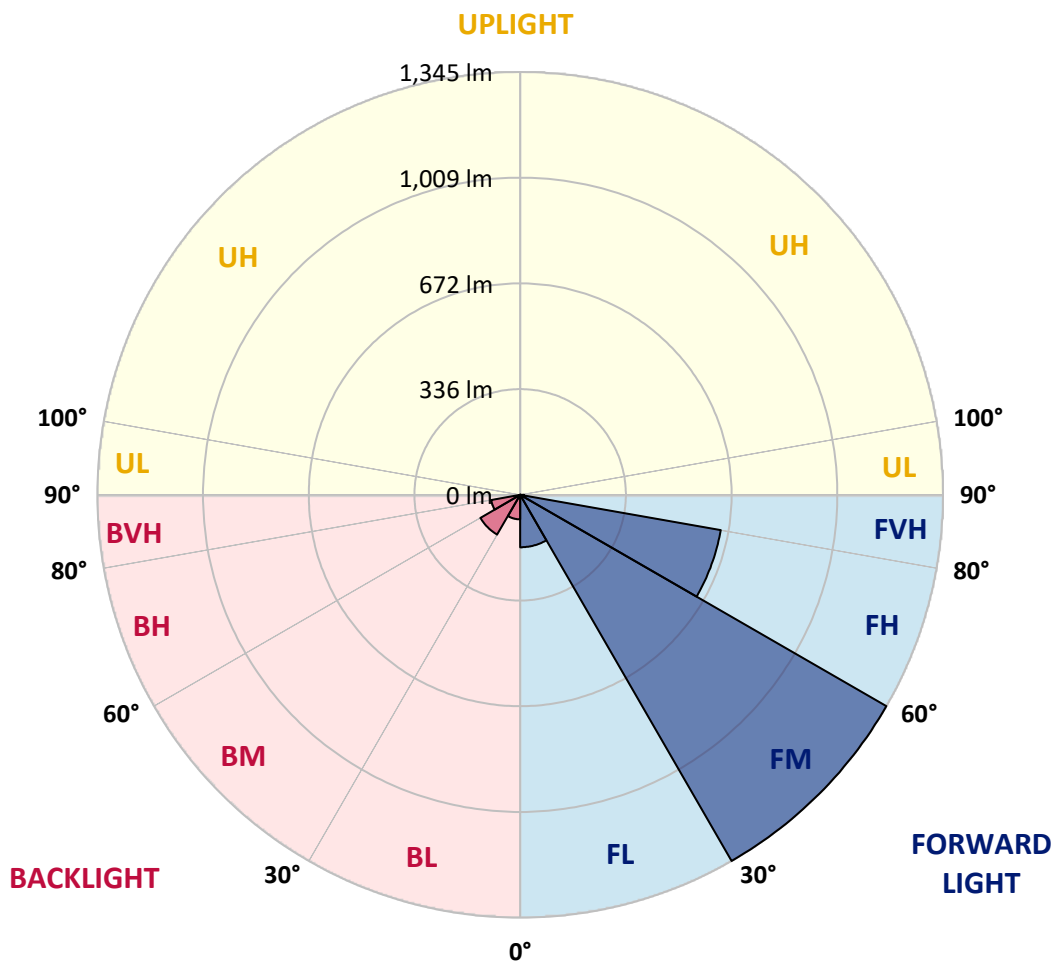
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	166.9	6.7			
FM	(30°-60°)	1344.9	54.0			
FH	(60°-80°)	647.9	26.0			G0/660
FVH	(80°-90°)	12.0	0.5			G1/100
BL	(0°-30°)	77.9	3.1	B0/110		
BM	(30°-60°)	146.2	5.9	B0/220		
BH	(60°-80°)	93.7	3.8	B0/110		G0/110
BVH	(80°-90°)	0.5	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	299.9	299.9	299.9	299.9	299.9	299.9	299.9	299.9	299.9	299.9	299.9
2.5°	307.9	307.3	306.7	306.0	306.0	305.5	304.9	303.6	302.4	301.2	300.6
5°	313.5	312.8	312.2	312.8	312.2	312.2	311.6	310.4	309.1	307.3	305.5
7.5°	317.7	317.1	316.6	317.1	317.7	318.3	318.9	317.7	317.1	314.6	312.8
10°	323.2	322.7	322.0	323.2	323.2	326.2	326.9	326.2	325.7	323.9	320.7
12.5°	331.2	331.8	331.8	333.0	334.3	337.9	339.1	337.3	337.3	334.9	331.2
15°	346.0	346.0	346.0	347.1	347.7	352.6	353.8	352.1	353.2	349.0	345.3
17.5°	359.9	360.5	361.7	364.3	364.3	368.5	370.9	370.9	373.4	367.8	363.0
20°	374.0	374.6	376.5	382.0	382.0	387.6	391.8	393.7	396.1	390.6	382.0
22.5°	389.3	389.3	392.3	401.0	399.2	410.2	418.1	421.2	423.6	416.3	402.8
25°	412.6	410.2	412.6	420.5	419.3	434.7	449.3	452.4	455.4	446.9	426.6
27.5°	456.7	453.0	444.4	445.0	445.0	462.8	483.6	487.9	489.7	482.4	457.2
30°	544.7	544.7	513.0	491.5	477.5	493.5	522.8	530.1	532.5	521.6	488.5
32.5°	698.5	698.5	639.7	585.2	532.0	532.0	565.6	579.1	581.6	568.7	530.1
35°	894.4	893.0	805.0	730.3	626.3	587.0	615.7	638.5	645.8	628.7	584.0
37.5°	1102.5	1094.6	999.6	914.0	771.3	675.2	683.8	713.8	720.4	706.5	653.8
40°	1271.4	1262.3	1185.8	1114.1	958.6	815.9	781.7	809.3	817.3	797.6	737.1
42.5°	1424.5	1401.8	1349.2	1297.8	1174.1	1059.6	912.1	923.1	931.7	910.9	830.7
45°	1535.3	1500.3	1473.5	1457.5	1392.1	1327.2	1081.0	1059.0	1062.1	1036.4	933.0
47.5°	1538.4	1513.9	1516.3	1557.9	1585.0	1582.4	1300.8	1222.5	1210.8	1168.0	1041.9
50°	1391.4	1405.5	1450.2	1569.0	1714.6	1802.8	1562.2	1415.9	1381.0	1303.9	1150.3
52.5°	1146.5	1168.6	1252.4	1452.6	1733.6	1947.9	1833.4	1636.9	1574.4	1438.5	1233.5
55°	898.0	899.2	987.3	1191.3	1606.8	1974.2	2050.1	1880.0	1784.4	1540.8	1288.6
57.5°	617.7	651.3	763.4	900.6	1321.1	1843.2	2131.5	2068.5	1945.5	1603.8	1327.2
60°	404.6	406.5	536.9	695.4	899.2	1499.8	2081.9	2168.2	2075.8	1641.2	1353.5
62°	285.2	288.3	369.1	568.0	677.6	1074.9	1972.3	2189.0	2149.2	1663.3	1381.0
62.5°	264.4	266.9	334.9	536.3	636.7	964.1	1933.3	2184.2	2160.3	1670.6	1390.8
65°	194.1	194.1	219.2	368.5	466.4	520.9	1638.2	2086.9	2145.7	1729.3	1427.6
67.5°	150.0	151.3	159.7	227.2	352.1	315.9	1045.6	1867.7	1992.6	1816.2	1448.3
70°	129.2	128.6	134.7	150.6	254.0	210.0	460.3	1457.5	1668.7	1794.2	1429.3
72.5°	95.5	96.1	110.2	132.2	176.9	136.5	208.1	773.8	1082.3	1404.3	1224.9
75°	61.1	61.8	77.8	104.1	127.3	89.4	119.9	230.7	443.1	778.7	749.3
77.5°	41.0	42.3	50.8	72.8	111.5	55.7	75.3	96.7	133.4	292.0	268.8
80°	27.6	27.6	32.4	48.9	70.4	46.6	40.4	64.3	69.2	90.5	45.4
82.5°	18.3	18.3	21.5	32.4	45.9	41.6	24.5	34.9	40.4	45.4	16.0
85°	11.0	11.0	14.6	20.2	30.0	23.3	16.0	19.5	20.8	28.7	8.5
87.5°	6.8	6.1	9.9	14.1	16.0	14.1	10.4	10.4	11.0	16.0	4.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	299.9	299.9	299.9	299.9	299.9	299.9	299.9	299.9	299.9	299.9	299.9
2.5°	299.4	298.8	298.2	296.8	295.1	293.8	292.6	291.4	290.2	290.2	292.0
5°	304.9	302.9	300.6	298.2	294.5	292.0	290.2	287.7	286.5	286.5	287.2
7.5°	311.6	309.8	305.5	301.2	295.6	291.4	287.2	281.6	277.3	275.5	277.3
10°	318.9	316.6	310.4	303.6	297.5	286.5	272.4	255.2	240.6	233.9	236.9
12.5°	328.1	325.0	317.7	308.5	294.5	267.4	232.6	192.9	167.7	156.1	158.5
15°	341.6	337.3	326.9	312.8	281.6	223.4	166.5	120.6	97.4	87.5	88.7
17.5°	357.5	352.1	337.9	311.6	248.6	161.0	99.2	70.4	60.6	58.1	58.1
20°	374.6	367.3	349.0	302.4	198.3	100.9	61.8	53.9	50.1	48.4	48.4
22.5°	392.3	382.6	358.2	281.1	141.4	63.1	50.8	45.4	41.0	39.3	39.3
25°	413.8	401.0	367.3	243.6	90.0	50.8	43.4	37.9	33.7	31.2	31.8
27.5°	438.9	422.4	375.2	197.1	58.1	44.0	36.2	30.6	27.0	25.6	25.6
30°	465.2	445.7	377.1	147.5	47.1	37.9	30.0	25.1	22.6	21.5	21.5
32.5°	501.4	475.6	371.6	97.9	39.8	31.8	25.1	20.8	19.0	18.3	18.3
35°	549.1	514.8	358.7	60.6	33.7	26.3	20.8	18.3	16.5	16.0	16.0
37.5°	609.6	569.4	336.1	41.6	28.7	21.5	17.7	16.0	14.6	14.1	14.1
40°	690.5	635.5	306.7	36.2	24.5	18.3	15.3	14.1	12.9	12.9	12.9
42.5°	776.2	715.6	268.8	31.8	20.8	16.0	13.4	12.2	11.6	11.0	11.0
45°	869.9	797.6	221.6	28.2	17.7	14.1	12.2	10.4	9.9	9.9	9.9
47.5°	962.9	882.2	170.2	24.5	15.3	12.2	10.4	9.2	8.5	7.9	7.9
50°	1058.4	958.6	124.9	21.5	13.4	11.0	9.2	7.9	6.8	6.1	6.1
52.5°	1127.5	1004.5	91.2	18.3	11.6	9.2	7.3	6.1	4.9	4.3	4.3
55°	1178.4	1032.7	66.7	15.3	10.4	7.9	6.1	4.9	3.8	3.8	3.1
57.5°	1218.1	1046.1	50.1	13.4	9.2	6.8	4.9	3.8	3.1	2.4	2.4
60°	1248.9	1046.8	37.3	11.0	7.9	5.5	3.8	2.4	1.8	1.8	1.8
62°	1289.1	1054.8	30.6	9.2	7.3	4.9	3.1	1.8	1.2	0.6	0.6
62.5°	1300.8	1057.8	29.4	9.2	6.8	4.3	2.4	1.8	1.2	0.6	0.6
65°	1354.7	1063.3	22.6	7.3	5.5	3.8	1.8	1.2	0.0	0.0	0.0
67.5°	1403.7	1054.8	16.5	5.5	4.3	2.4	1.8	0.6	0.0	0.0	0.0
70°	1398.7	996.0	11.6	3.8	3.1	1.8	1.2	0.0	0.0	0.0	0.0
72.5°	1152.6	745.5	7.9	3.1	1.8	1.2	0.6	0.0	0.0	0.0	0.0
75°	696.0	326.2	5.5	1.8	1.8	1.2	0.6	0.0	0.0	0.0	0.0
77.5°	228.4	118.1	3.8	1.2	1.2	0.6	0.6	0.0	0.0	0.0	0.0
80°	37.3	19.5	1.8	1.2	1.2	0.6	0.6	0.0	0.0	0.0	0.0
82.5°	11.6	4.9	1.2	1.2	0.6	0.6	0.0	0.0	0.0	0.0	0.0
85°	4.3	1.8	1.2	1.2	0.6	0.6	0.0	0.0	0.0	0.0	0.0
87.5°	1.8	1.2	1.2	1.2	0.6	0.6	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)