

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: P234731

Luminaire Tested: **ARCH-AF24-40-D-U-T3-8027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234731
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-40-D-U-T3-8027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 500mA LIGHT ENGINE 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: 2862 lumens
Efficiency: N/A
Efficacy: 71.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 40
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

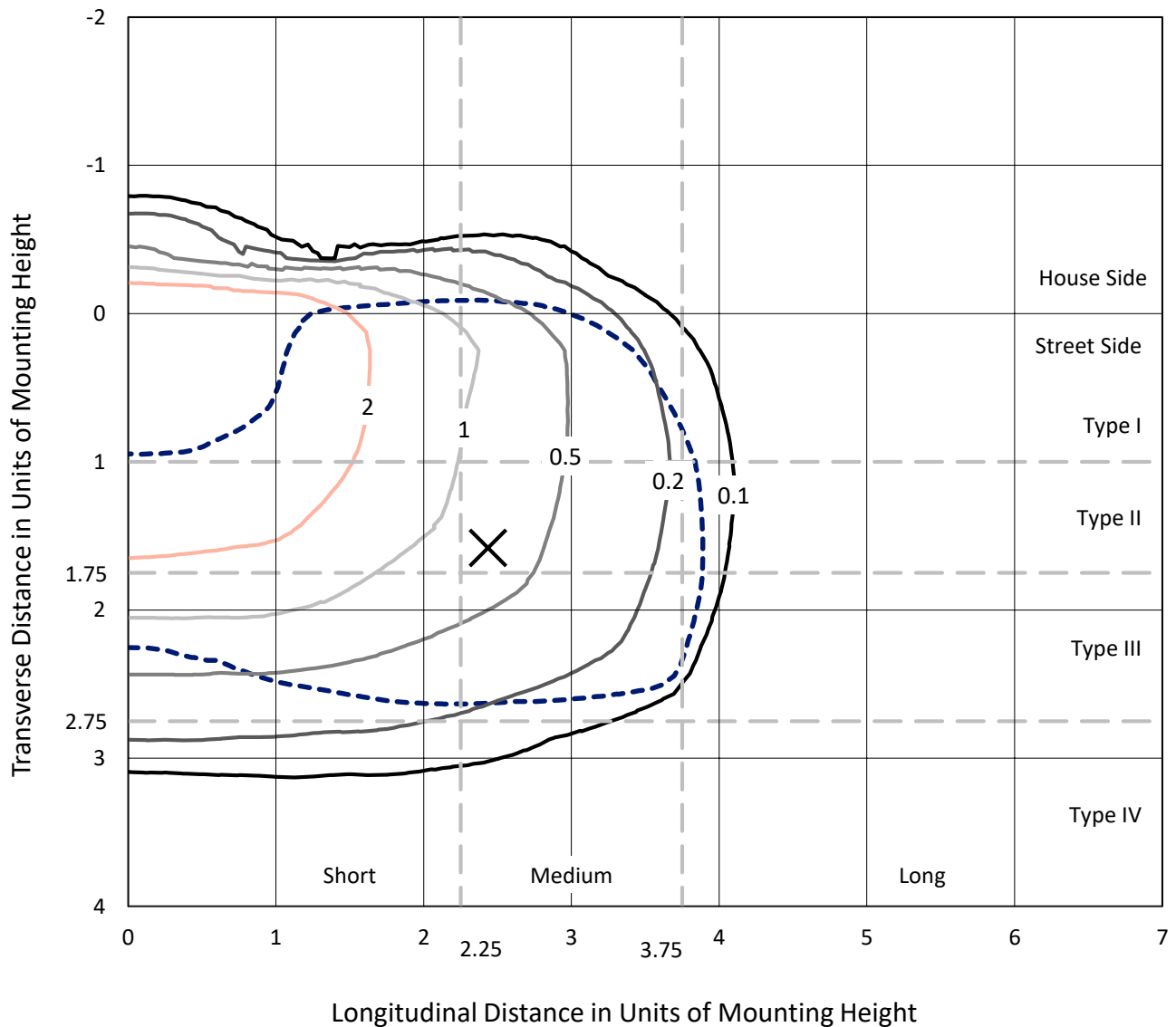


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

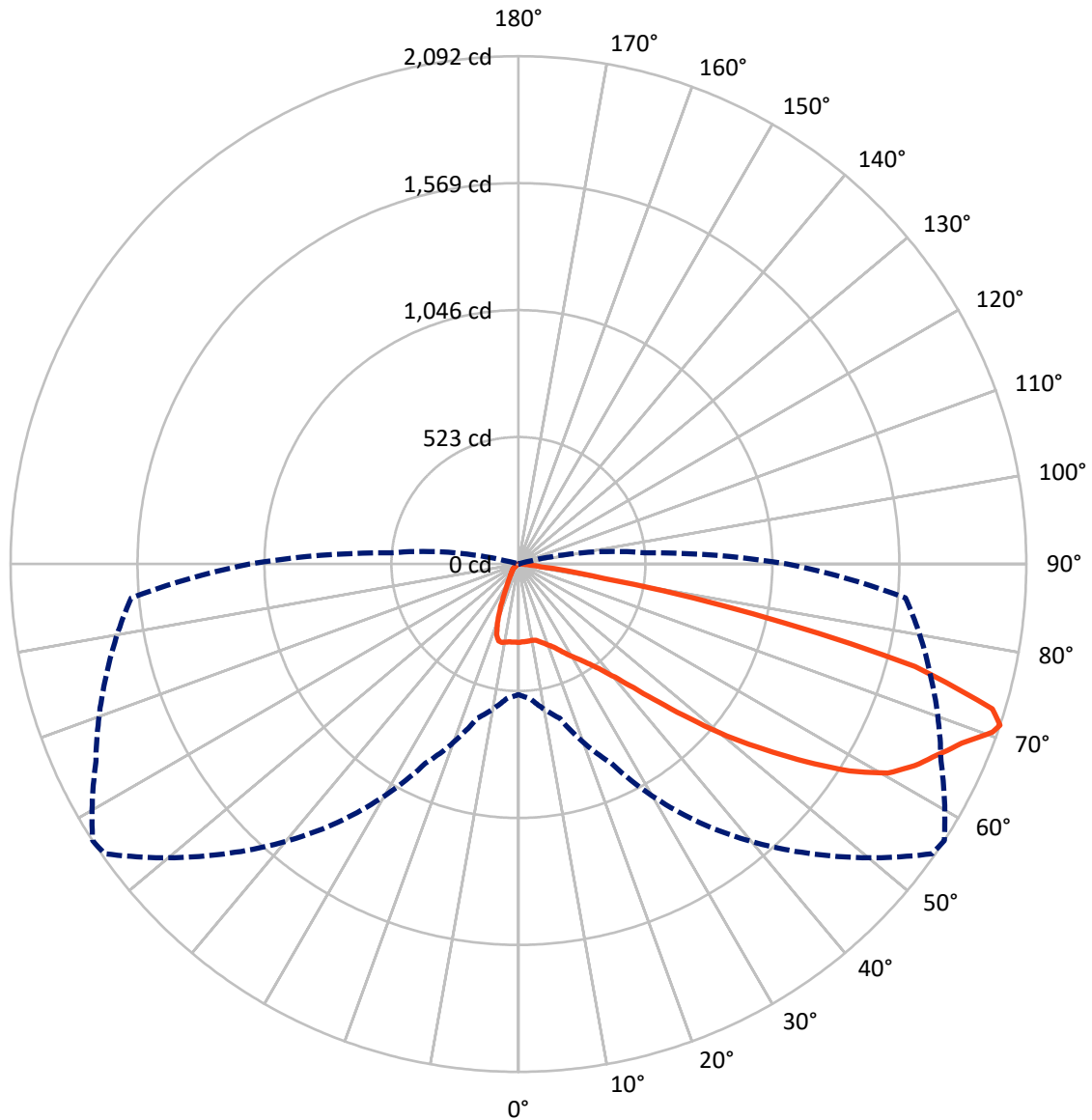


Based on 10 foot mounting height. Maximum calculated value = 4 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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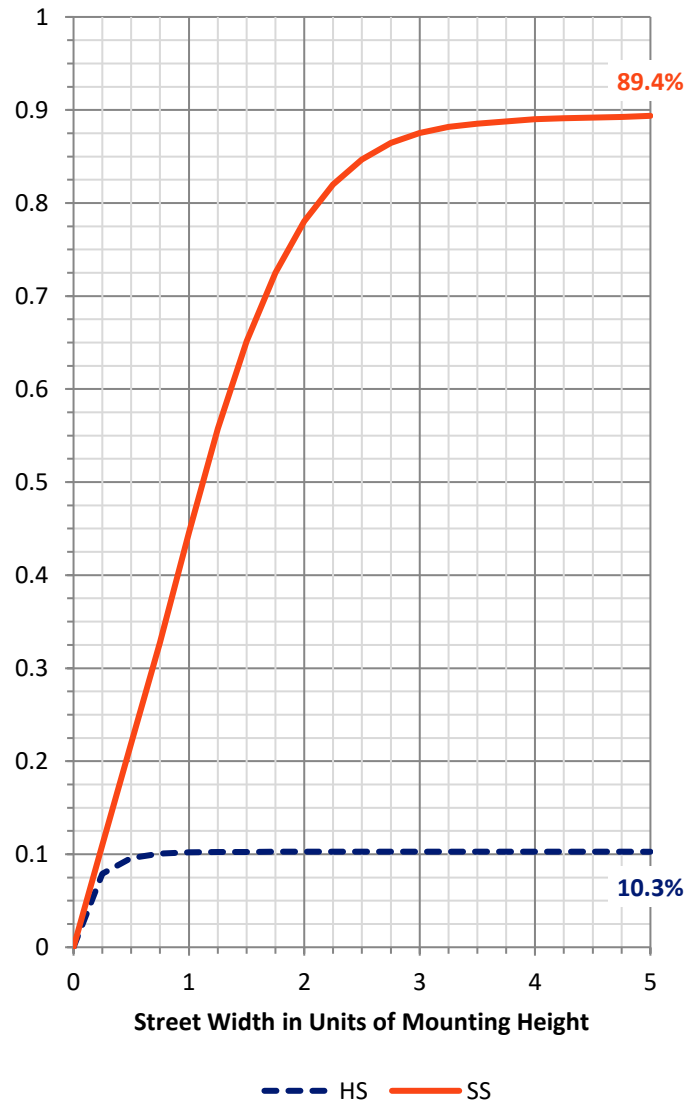
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	296.6	0.0	296.6
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	2565.4	0.0	2565.4
	% Fixture	89.6	0.0	89.6
Total	Lumens	2862.0	0.0	2862.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.4	1.1
10°-20°	81.2	2.8
20°-30°	126.7	4.4
30°-40°	214.1	7.5
40°-50°	415.9	14.5
50°-60°	698.5	24.4
60°-70°	833.6	29.1
70°-80°	439.3	15.3
80°-90°	22.3	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°	2862.0	100.0
0°-180°	2862.0	100.0



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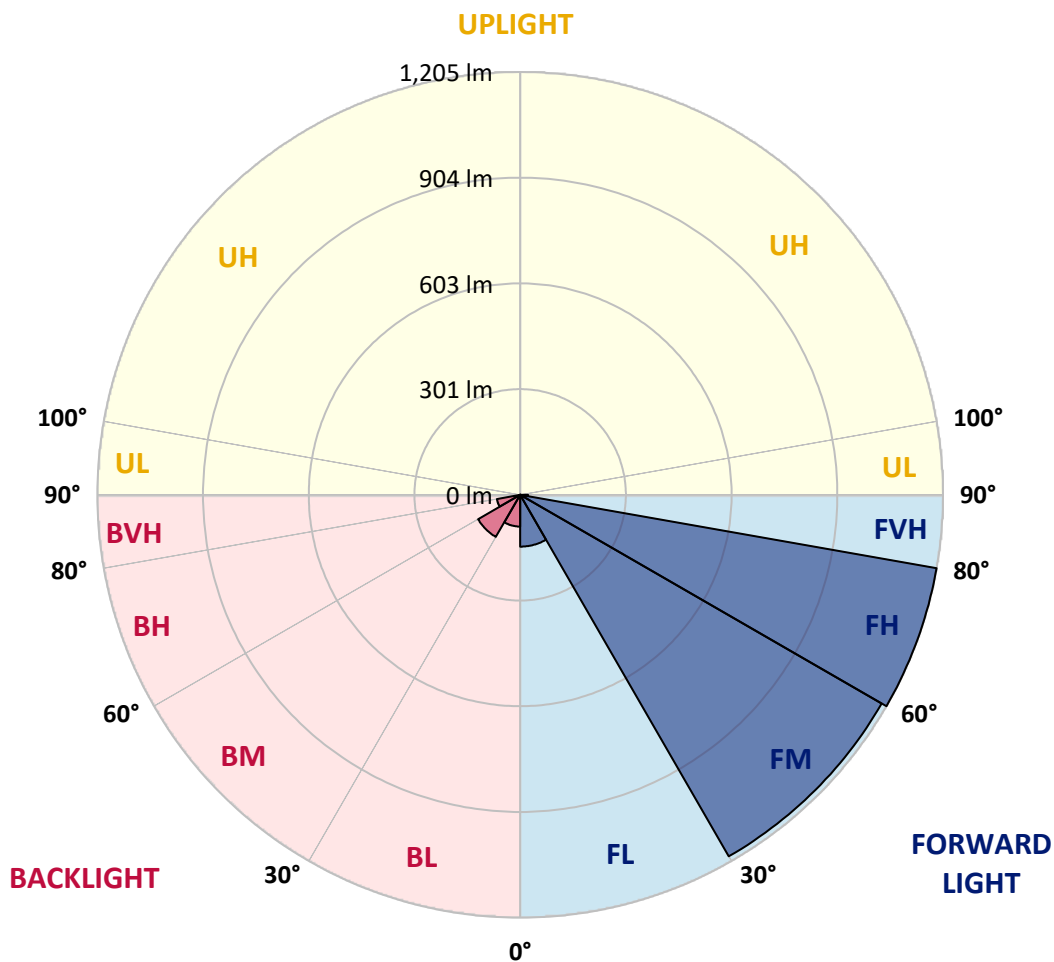
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	147.8	5.2			
FM	(30°-60°)	1190.0	41.6			
FH	(60°-80°)	1205.5	42.1			G1/1800
FVH	(80°-90°)	22.1	0.8			G1/100
BL	(0°-30°)	90.5	3.2	B0/110		
BM	(30°-60°)	138.5	4.8	B0/220		
BH	(60°-80°)	67.4	2.4	B0/110		G0/110
BVH	(80°-90°)	0.2	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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	323.4	323.4	323.4	323.4	323.4	323.4	323.4	323.4	323.4	323.4	323.4
2.5°	318.8	318.8	318.8	319.4	320.1	320.1	321.4	320.8	320.8	320.8	322.1
5°	310.1	310.8	311.4	312.8	315.4	317.4	320.8	320.8	321.4	322.8	323.4
7.5°	298.1	298.8	300.8	303.4	308.8	313.4	318.8	320.1	322.1	325.5	326.8
10°	290.8	292.1	294.8	298.1	304.1	310.1	316.8	318.8	324.8	330.8	334.1
12.5°	288.8	289.4	292.1	297.4	304.8	312.1	320.8	322.8	331.5	340.8	346.1
15°	292.1	292.8	294.1	300.1	308.8	318.1	329.5	332.1	342.8	353.5	360.1
17.5°	298.1	298.1	299.4	304.8	314.1	324.8	339.5	343.5	355.5	367.5	374.8
20°	302.1	302.1	304.1	309.4	320.1	334.1	351.5	356.8	370.1	383.5	390.1
22.5°	306.1	306.8	308.8	314.8	326.8	346.1	366.1	371.5	386.8	400.8	407.5
25°	317.4	316.8	317.4	322.8	336.8	360.8	386.1	392.8	408.8	424.2	427.5
27.5°	348.8	347.5	338.8	335.5	346.1	376.1	411.5	418.2	436.8	452.2	452.2
30°	420.8	418.2	396.8	369.5	360.8	390.1	435.5	444.8	468.8	482.2	478.2
32.5°	512.2	506.2	478.8	432.2	397.5	408.8	460.8	471.5	502.2	513.5	504.8
35°	612.2	611.6	577.5	517.5	468.2	447.5	493.5	506.2	544.9	554.9	540.9
37.5°	718.3	720.9	698.3	615.6	557.5	510.8	536.9	551.5	598.9	610.9	597.5
40°	836.3	835.6	827.0	728.9	664.9	600.9	599.5	612.9	670.2	688.9	670.2
42.5°	985.7	984.4	953.0	865.0	795.0	718.3	690.9	695.6	759.6	790.3	762.9
45°	1137.7	1128.4	1092.4	1016.4	954.3	863.6	811.6	811.6	866.3	908.3	865.6
47.5°	1222.4	1213.1	1198.4	1156.4	1137.7	1036.4	959.7	950.3	993.0	1035.7	975.7
50°	1333.8	1333.8	1297.1	1281.1	1313.1	1241.8	1123.1	1113.7	1134.4	1168.4	1089.7
52.5°	1421.8	1405.8	1379.8	1393.8	1485.2	1452.5	1286.5	1268.5	1284.5	1293.1	1189.1
55°	1458.5	1443.2	1441.2	1492.5	1633.9	1588.6	1453.9	1437.8	1436.5	1393.8	1275.8
57.5°	1465.9	1452.5	1477.9	1567.9	1778.6	1699.9	1620.6	1608.6	1571.2	1464.5	1364.5
60°	1403.8	1410.5	1471.9	1609.2	1864.0	1796.6	1761.3	1748.6	1662.6	1524.5	1463.2
62.5°	1276.5	1292.5	1407.2	1613.2	1832.7	1836.0	1839.3	1830.7	1733.3	1579.2	1562.6
65°	1125.7	1130.4	1268.5	1557.9	1778.0	1824.0	1896.7	1896.0	1787.3	1640.6	1674.6
67.5°	927.7	935.7	1055.0	1371.2	1668.6	1818.7	1972.0	1970.0	1848.7	1710.6	1741.3
70°	690.2	700.3	797.0	1066.4	1424.5	1752.0	2070.7	2072.1	1913.4	1764.0	1695.3
71°	538.2	556.2	657.6	905.7	1299.8	1684.6	2080.1	2092.1	1920.7	1756.6	1600.6
72.5°	264.1	285.4	412.8	637.6	1069.7	1533.9	2018.7	2042.1	1874.7	1665.3	1368.5
75°	68.7	72.7	123.4	260.8	573.5	1016.4	1627.9	1687.3	1532.5	1267.8	836.3
77.5°	43.3	44.7	58.0	101.4	214.7	386.1	956.3	985.7	875.6	642.2	294.8
80°	30.7	31.3	36.7	65.4	125.4	112.7	344.1	356.8	316.8	170.1	52.7
82.5°	18.7	18.7	26.7	42.0	77.4	61.4	90.7	96.7	85.4	47.4	17.3
85°	10.7	11.3	16.7	28.7	36.7	30.0	34.0	36.0	36.7	31.3	7.3
87.5°	8.7	9.3	14.7	24.0	20.0	14.7	14.7	15.3	16.0	18.7	3.3
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°	323.4	323.4	323.4	323.4	323.4	323.4	323.4	323.4	323.4	323.4	323.4
2.5°	322.1	322.1	322.8	322.1	322.1	322.1	322.8	322.8	322.8	324.1	324.8
5°	323.4	323.4	323.4	322.8	322.1	322.1	323.4	324.1	324.1	326.1	326.1
7.5°	326.8	326.8	325.5	324.1	322.8	320.8	321.4	322.1	321.4	322.1	322.1
10°	334.1	334.1	332.1	329.5	325.5	319.4	311.4	301.4	292.1	288.8	287.4
12.5°	346.1	345.5	341.5	336.8	328.1	307.4	277.4	242.1	212.7	204.7	202.1
15°	359.5	358.1	353.5	345.5	322.1	267.4	204.7	159.4	131.4	124.7	123.4
17.5°	373.5	371.5	364.8	348.8	294.8	198.7	132.0	100.0	84.7	83.4	84.0
20°	388.1	385.5	376.1	342.1	238.1	132.7	85.4	77.4	76.0	76.0	76.7
22.5°	404.8	401.5	388.8	318.1	173.4	88.0	73.4	72.7	72.0	71.4	71.4
25°	424.2	420.2	400.8	274.8	119.4	72.0	70.0	68.0	66.7	65.4	64.7
27.5°	447.5	442.2	410.1	221.4	82.0	67.4	66.0	62.7	60.0	57.4	57.4
30°	470.8	464.2	407.5	166.7	66.7	62.7	60.0	56.0	52.0	49.4	48.7
32.5°	495.5	488.8	390.1	112.0	60.7	57.4	54.0	48.0	43.3	40.0	39.3
35°	532.2	526.9	356.1	74.0	54.7	50.7	46.0	40.0	34.0	30.7	30.0
37.5°	586.9	580.2	314.1	56.7	48.0	42.0	38.0	31.3	25.3	22.0	21.3
40°	660.2	640.2	264.1	50.0	42.0	34.7	29.3	22.7	18.0	16.0	16.0
42.5°	745.6	698.3	210.1	45.3	37.3	28.7	21.3	15.3	12.7	12.0	12.0
45°	836.3	752.3	156.1	42.0	32.7	22.7	15.3	10.7	9.3	8.7	8.7
47.5°	929.7	796.3	108.7	38.0	27.3	17.3	10.7	8.0	6.7	6.0	6.0
50°	1017.0	825.0	76.7	34.0	23.3	12.7	8.0	6.0	4.7	4.7	4.7
52.5°	1077.7	822.3	55.4	29.3	18.0	8.7	5.3	4.0	4.0	4.0	4.0
55°	1131.1	812.3	43.3	25.3	14.0	6.0	4.0	3.3	3.3	2.7	2.7
57.5°	1176.4	796.3	36.7	20.7	10.0	4.7	2.7	2.7	2.0	2.0	2.0
60°	1215.1	776.3	30.7	17.3	6.7	3.3	2.0	1.3	1.3	0.7	1.3
62.5°	1267.8	763.6	26.7	13.3	4.7	2.0	1.3	0.7	0.7	0.0	0.0
65°	1306.5	739.6	22.7	9.3	2.7	1.3	0.7	0.7	0.0	0.0	0.0
67.5°	1307.8	696.2	16.7	5.3	2.0	1.3	0.7	0.0	0.0	0.0	0.0
70°	1202.4	593.5	10.7	2.7	1.3	0.7	0.7	0.0	0.0	0.0	0.0
71°	1105.7	525.5	8.7	2.0	1.3	0.7	0.0	0.0	0.0	0.0	0.0
72.5°	911.0	386.1	6.7	2.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0
75°	502.2	140.1	3.3	1.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	160.7	42.7	2.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	27.3	6.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	9.3	2.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.3	0.7	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)