

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: P265885

Luminaire Tested: **ARCH-AF16-30-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265885
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF16-30-D-U-T4W-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 560mA LIGHT ENGINE WITH 16 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2323.1 lumens
Efficiency: N/A
Efficacy: 72.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-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

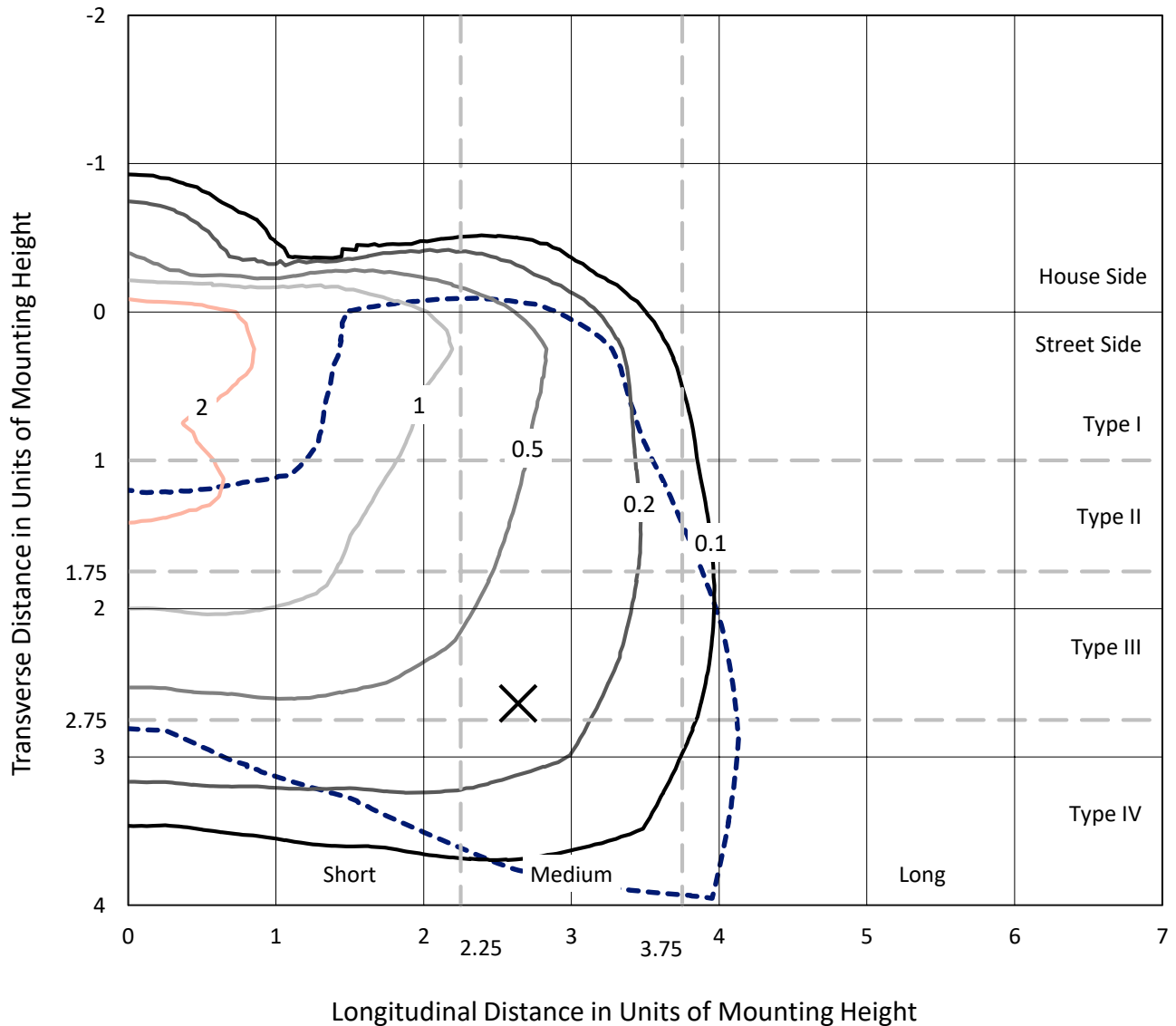


REPORT NUMBER: P265885

CATALOG NUMBER: ARCH-AF16-30-D-U-T4W-7027-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

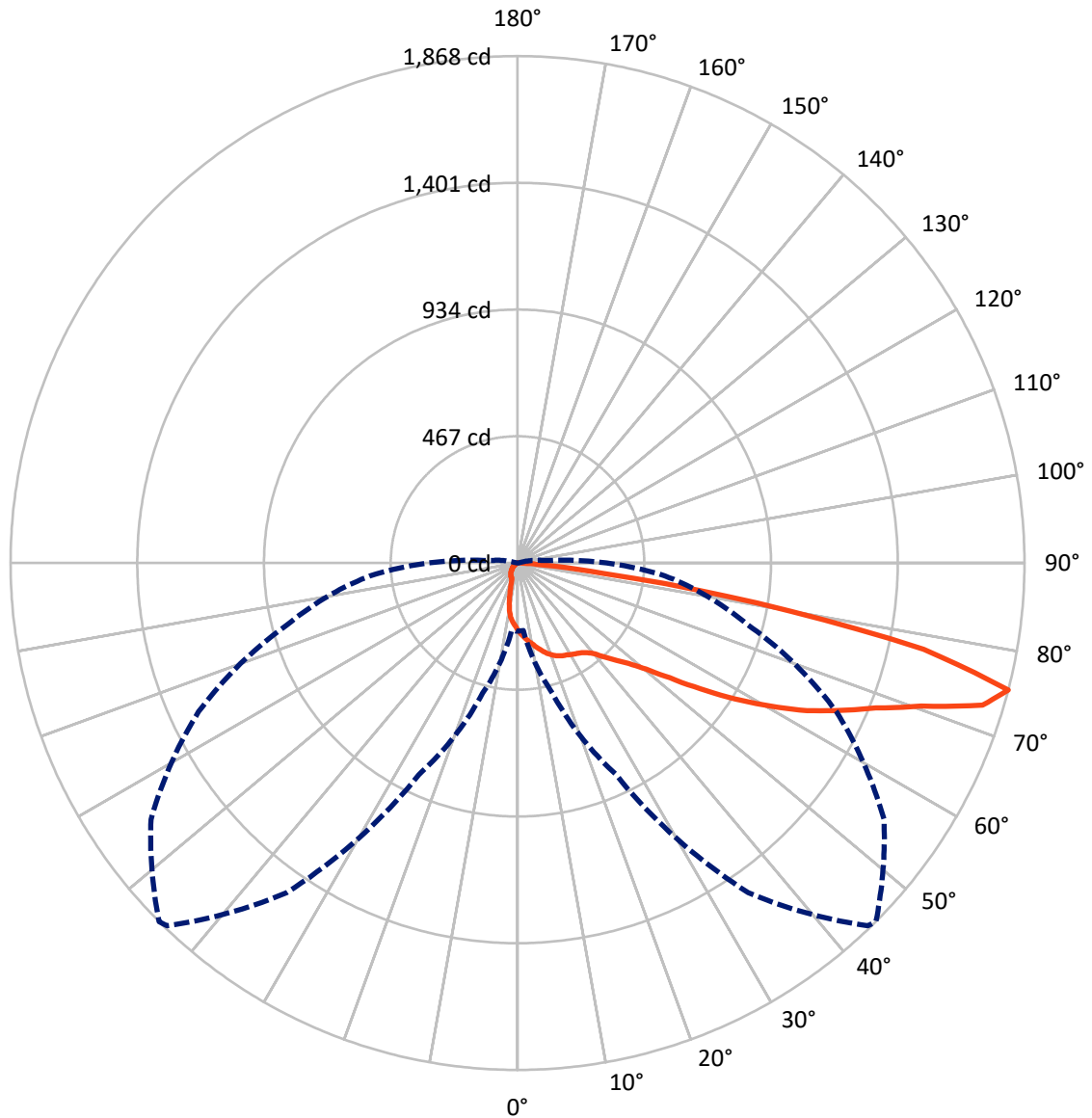


Based on 10 foot mounting height. Maximum calculated value = 3.3 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P265885

CATALOG NUMBER: ARCH-AF16-30-D-U-T4W-7027-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical



REPORT NUMBER: P265885

CATALOG NUMBER: ARCH-AF16-30-D-U-T4W-7027-HSS

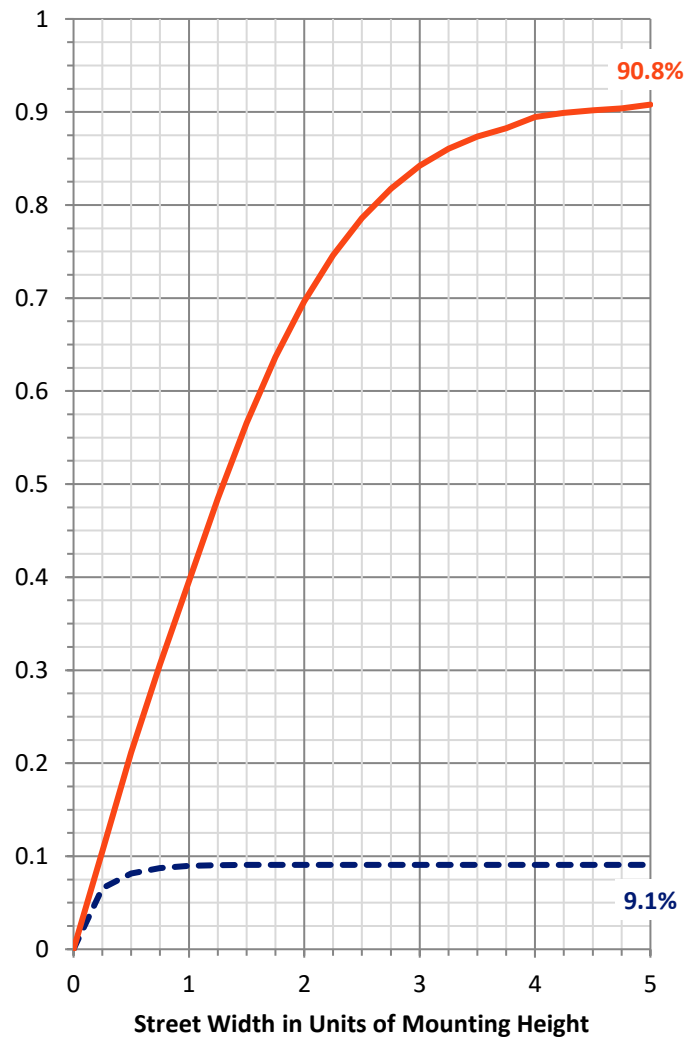
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	212.5	0.0	212.5
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	2110.7	0.0	2110.7
	% Fixture	90.9	0.0	90.9
Total	Lumens	2323.1	0.0	2323.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.4	1.0
10°-20°	66.4	2.9
20°-30°	110.0	4.7
30°-40°	159.2	6.9
40°-50°	260.7	11.2
50°-60°	464.6	20.0
60°-70°	683.0	29.4
70°-80°	515.3	22.2
80°-90°	40.4	1.7
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°	2323.1	100.0
0°-180°	2323.1	100.0



--- HS — SS

REPORT NUMBER: P265885

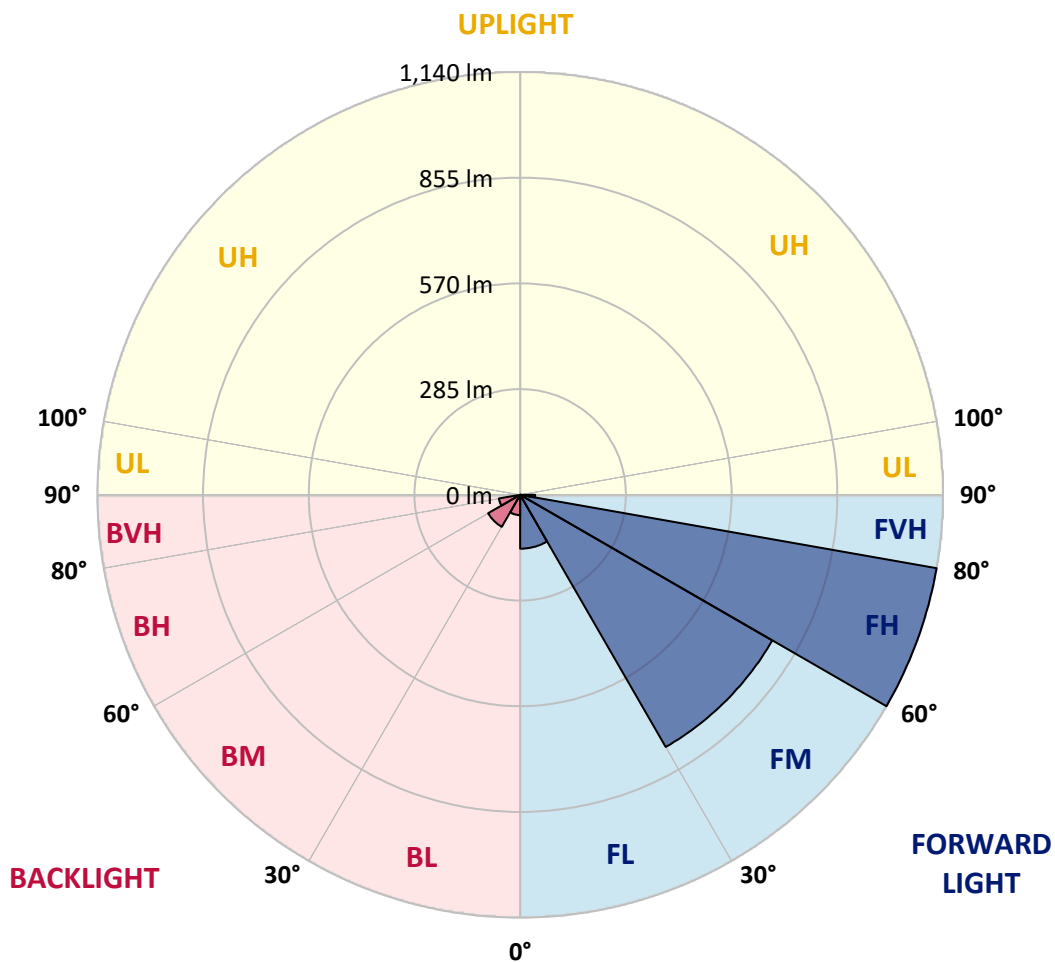
CATALOG NUMBER: ARCH-AF16-30-D-U-T4W-7027-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	145.3	6.3			
FM	(30°-60°)	785.0	33.8			
FH	(60°-80°)	1140.1	49.1			G1/1800
FVH	(80°-90°)	40.3	1.7			G1/100
BL	(0°-30°)	54.6	2.4	B0/110		
BM	(30°-60°)	99.6	4.3	B0/220		
BH	(60°-80°)	58.2	2.5	B0/110		G0/110
BVH	(80°-90°)	0.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type IV Medium





REPORT NUMBER: P265885

CATALOG NUMBER: ARCH-AF16-30-D-U-T4W-7027-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	248.6	248.6	248.6	248.6	248.6	248.6	248.6	248.6	248.6	248.6	248.6
2.5°	269.9	269.9	269.3	268.9	266.1	263.4	262.8	261.0	256.1	252.9	249.5
5°	292.5	292.9	291.9	289.2	283.1	277.0	276.5	272.0	262.8	256.1	249.0
7.5°	313.9	314.9	312.3	307.3	300.2	291.4	290.8	282.5	270.5	261.0	250.6
10°	332.1	332.1	328.2	322.1	314.4	305.2	303.9	294.6	280.9	269.3	255.6
12.5°	351.9	351.2	345.8	337.6	328.7	319.9	319.3	307.8	294.6	279.8	262.8
15°	369.9	368.8	361.7	354.0	344.7	335.3	334.8	323.2	309.5	291.9	273.3
17.5°	379.9	379.4	372.6	365.0	357.3	350.2	349.6	337.6	322.8	304.5	283.7
20°	381.5	382.0	376.6	369.9	365.6	361.7	361.7	350.7	334.8	315.6	294.6
22.5°	382.0	383.7	379.9	371.1	369.9	370.6	371.5	362.8	346.3	328.2	306.2
25°	385.9	388.1	385.4	375.0	373.9	377.6	378.7	375.0	360.1	342.0	319.3
27.5°	393.5	395.9	393.5	380.4	378.7	382.6	383.7	385.9	375.0	355.1	333.1
30°	409.0	409.5	404.5	388.1	384.8	389.8	391.4	397.4	388.6	367.8	346.3
32.5°	435.9	430.5	415.6	393.5	390.9	396.3	397.9	404.5	401.4	379.9	360.1
35°	491.0	462.3	428.2	401.4	398.6	404.1	406.3	415.6	417.3	397.0	377.1
37.5°	490.4	464.6	458.0	416.2	412.3	416.2	418.9	430.5	437.0	419.5	401.8
40°	525.0	514.0	514.0	444.2	431.5	437.0	439.8	451.3	462.8	449.2	430.9
42.5°	633.8	626.7	619.0	498.0	458.5	473.9	475.6	482.7	496.5	492.0	470.5
45°	755.4	748.7	719.1	589.3	504.7	507.5	511.2	522.9	542.5	550.8	525.6
47.5°	850.4	843.8	818.5	699.2	576.6	552.5	552.5	575.0	605.7	626.7	602.6
50°	926.8	919.1	903.8	816.3	694.8	617.3	614.0	640.4	686.0	718.5	701.9
52.5°	1001.0	978.6	969.1	937.3	828.4	711.4	702.6	721.2	784.5	824.6	810.8
55°	1050.5	1047.2	1037.4	1048.3	968.6	825.7	817.9	821.8	901.0	927.9	910.9
57.5°	1096.7	1096.1	1118.1	1169.2	1121.4	956.5	944.4	938.4	1013.6	1007.1	1021.9
60°	1153.9	1144.0	1195.0	1268.1	1261.6	1084.1	1070.3	1058.3	1100.1	1081.3	1155.0
62.5°	1156.6	1153.9	1257.7	1362.8	1400.6	1213.8	1197.8	1154.4	1175.3	1153.9	1281.9
65°	1051.6	1065.4	1284.1	1412.8	1517.2	1327.5	1308.3	1240.6	1242.4	1228.2	1431.4
67.5°	1028.0	1035.1	1211.6	1466.7	1601.4	1442.5	1424.4	1340.2	1320.5	1321.5	1520.0
70°	969.1	980.2	1121.4	1462.8	1667.9	1595.8	1577.8	1486.4	1438.6	1385.2	1451.8
72.5°	740.5	759.2	944.9	1282.5	1649.6	1796.5	1791.6	1671.7	1485.8	1272.1	1098.4
75°	250.6	250.1	496.5	861.5	1482.1	1858.1	1867.9	1648.6	1296.3	877.4	545.4
77.5°	53.9	54.3	102.2	349.1	984.5	1491.9	1529.9	1243.4	836.1	390.9	124.8
80°	26.4	26.9	42.3	92.3	393.5	836.7	896.1	639.4	308.9	78.1	20.9
82.5°	13.1	13.7	22.0	48.9	145.6	297.3	317.7	235.3	88.6	43.9	10.4
85°	4.9	4.9	11.0	29.1	66.6	69.8	85.8	68.2	53.3	35.8	2.8
87.5°	1.1	1.1	6.1	14.4	29.6	22.0	22.0	20.9	32.3	24.2	1.1
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: P265885

CATALOG NUMBER: ARCH-AF16-30-D-U-T4W-7027-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	248.6	248.6	248.6	248.6	248.6	248.6	248.6	248.6	248.6	248.6	248.6
2.5°	247.9	245.7	241.9	238.1	235.3	232.0	230.3	228.7	228.1	227.6	228.7
5°	245.1	241.9	234.7	228.7	223.1	218.7	215.6	212.2	210.6	209.5	210.1
7.5°	245.1	240.2	229.7	220.4	211.6	202.3	193.0	185.8	180.3	177.1	177.5
10°	247.9	241.4	227.6	215.0	198.4	178.7	158.3	142.9	132.5	126.4	126.4
12.5°	254.0	245.1	228.1	208.3	180.3	145.6	115.0	96.2	88.6	84.1	84.7
15°	262.2	251.7	230.9	199.6	155.0	108.2	80.3	68.2	68.2	69.3	69.8
17.5°	271.6	260.0	233.1	186.4	122.6	77.6	63.2	62.2	63.8	66.6	66.6
20°	280.9	268.2	234.2	165.5	91.7	61.5	59.9	59.9	61.1	63.8	64.3
22.5°	292.5	278.7	233.1	139.6	68.7	58.3	57.8	57.8	57.8	61.1	61.1
25°	304.5	290.8	228.7	112.2	58.3	56.1	55.5	54.9	54.9	57.8	58.3
27.5°	318.3	303.4	218.3	85.8	54.9	53.9	53.3	52.2	52.2	54.3	54.3
30°	332.1	317.7	202.3	64.9	52.2	51.7	50.6	49.4	48.4	50.6	50.6
32.5°	346.8	332.6	181.4	51.7	48.4	48.4	47.8	46.2	45.0	46.2	46.7
35°	366.7	349.6	157.7	45.0	43.4	43.4	43.4	42.8	40.7	41.9	41.9
37.5°	393.1	373.2	130.3	41.9	39.5	38.4	38.4	38.4	36.8	37.4	37.4
40°	426.5	400.7	103.9	39.0	36.8	34.0	33.0	33.5	32.3	32.3	31.9
42.5°	472.1	430.5	78.1	36.8	34.7	30.8	28.6	28.0	26.9	26.4	26.4
45°	537.6	466.7	56.1	34.7	33.0	26.9	24.8	23.0	20.3	18.7	18.7
47.5°	622.3	507.9	41.9	32.3	31.4	23.6	20.9	17.5	13.7	12.7	12.7
50°	725.7	554.2	35.2	29.1	28.6	20.9	16.4	11.6	7.6	6.6	7.1
52.5°	826.3	597.6	31.4	25.8	25.3	18.1	12.0	6.1	3.4	3.4	3.4
55°	910.9	628.4	28.6	23.0	22.0	14.4	6.6	2.8	1.6	1.6	1.6
57.5°	987.2	645.9	25.8	20.3	17.5	9.9	2.8	1.1	1.1	0.5	0.5
60°	1057.1	656.4	22.5	17.5	13.7	5.5	1.1	0.5	0.5	0.0	0.0
62.5°	1125.8	664.0	19.3	14.4	10.4	2.2	0.5	0.5	0.0	0.0	0.0
65°	1178.0	661.3	15.5	11.6	6.6	1.1	0.5	0.0	0.0	0.0	0.0
67.5°	1176.4	624.0	11.6	8.9	3.4	0.5	0.0	0.0	0.0	0.0	0.0
70°	1052.2	525.6	7.6	5.5	1.1	0.5	0.0	0.0	0.0	0.0	0.0
72.5°	746.5	337.0	4.9	3.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	328.7	102.2	2.8	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	64.3	23.6	1.6	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	15.5	2.8	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	6.6	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.6	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.1	0.5	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)