

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: P196165

Luminaire Tested: **NVN-AF-01-LED-U-SL4-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P196165
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24285)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-AF-01-LED-U-SL4-HSS
Description: NAVION ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5092.3 lumens
Efficiency: N/A
Efficacy: 86.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B0 - U0 - G2

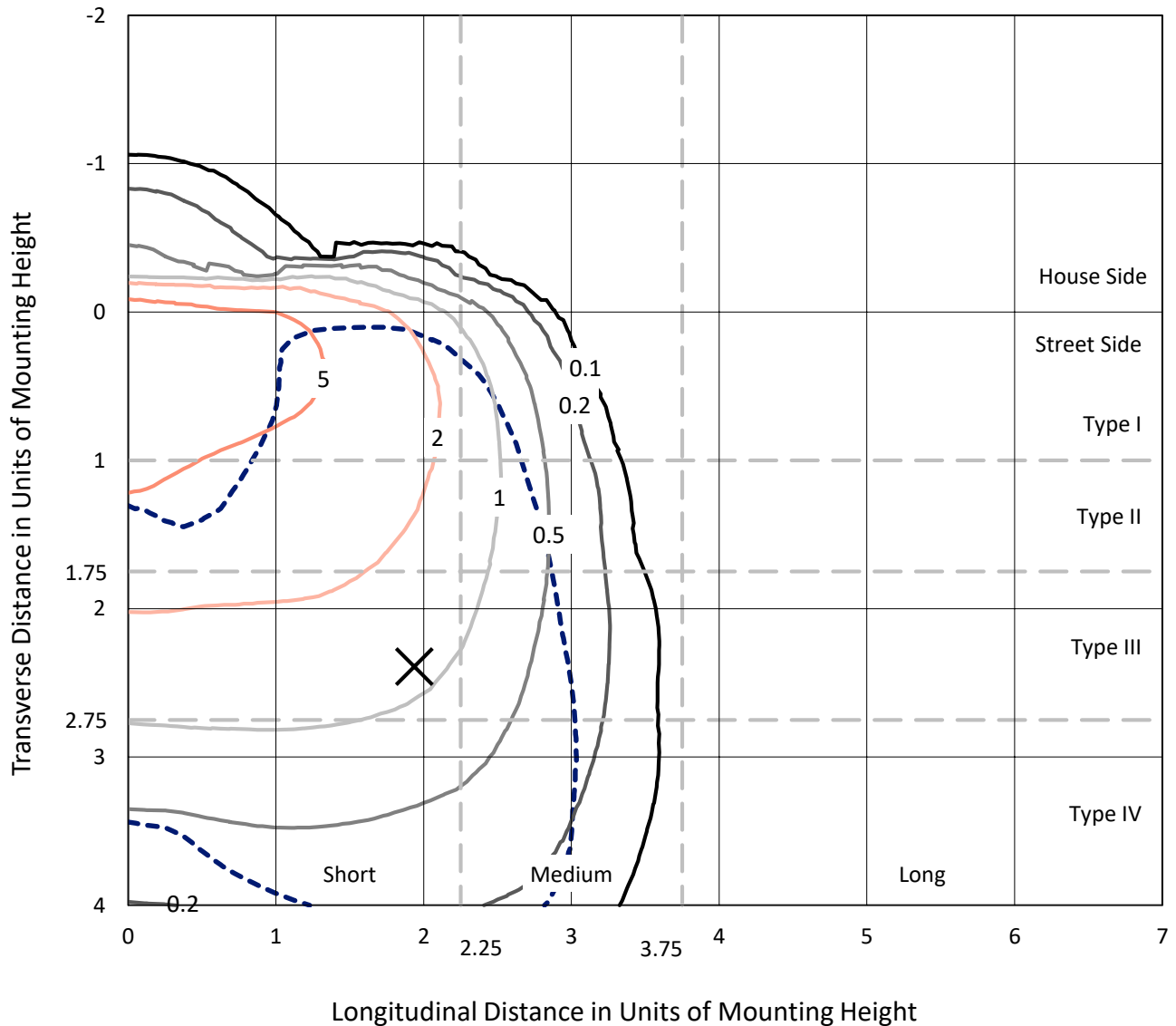
Input Watts (W): 59
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

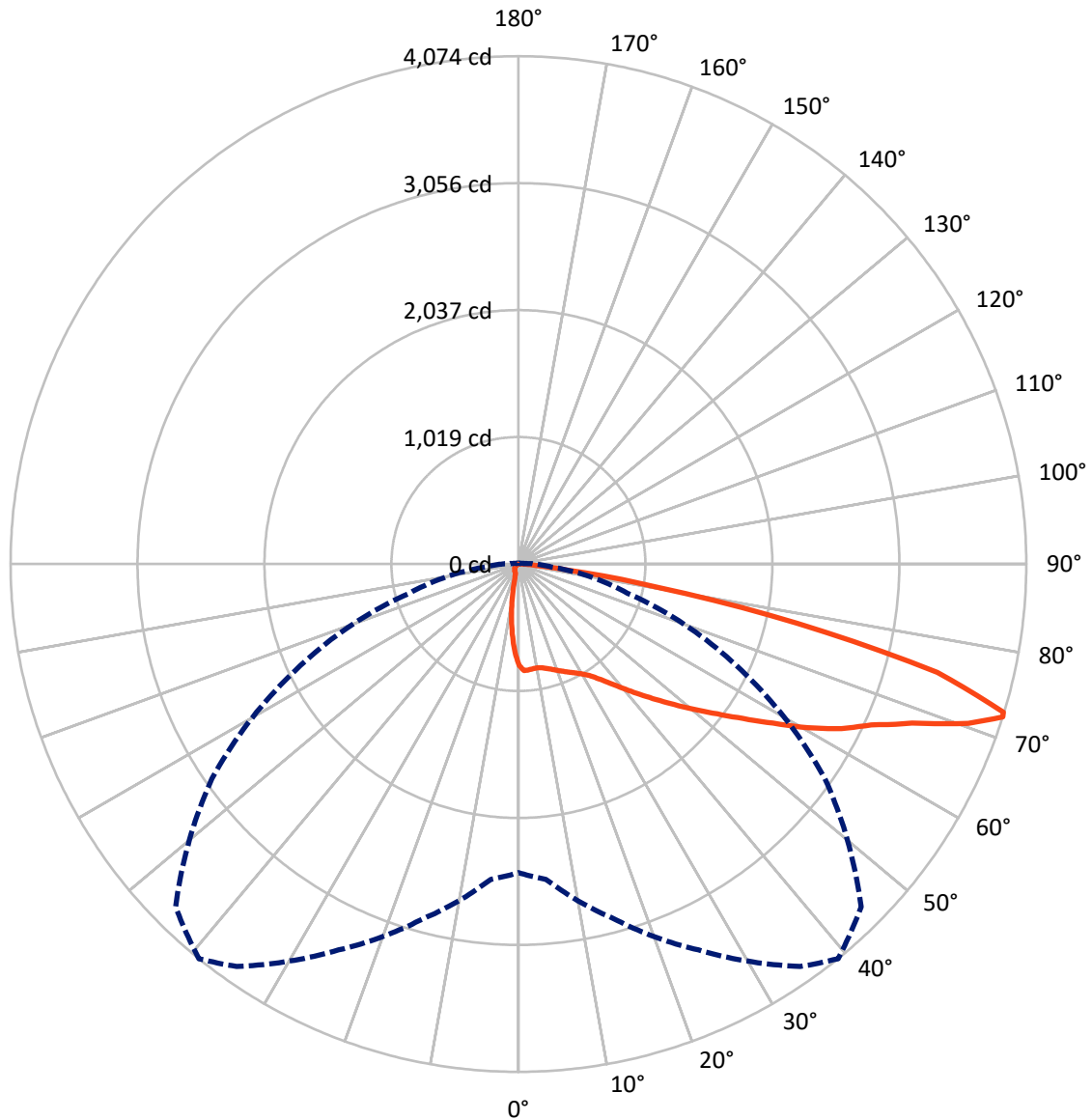
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.6 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

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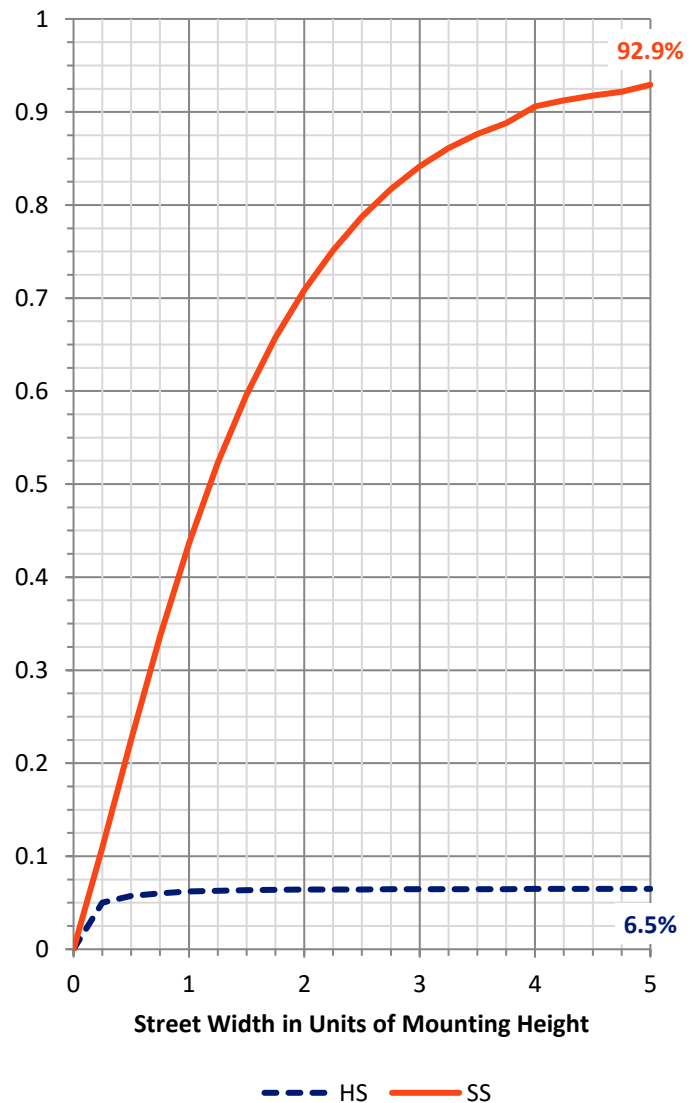
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	333.7	0.0	333.7
	% Fixture	6.6	0.0	6.6
Street Side	Lumens	4758.5	0.0	4758.5
	% Fixture	93.4	0.0	93.4
Total	Lumens	5092.3	0.0	5092.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.3	1.3
10°-20°	160.5	3.2
20°-30°	266.6	5.2
30°-40°	424.8	8.3
40°-50°	701.3	13.8
50°-60°	1059.0	20.8
60°-70°	1379.5	27.1
70°-80°	932.2	18.3
80°-90°	102.1	2.0
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°	5092.3	100.0
0°-180°	5092.3	100.0



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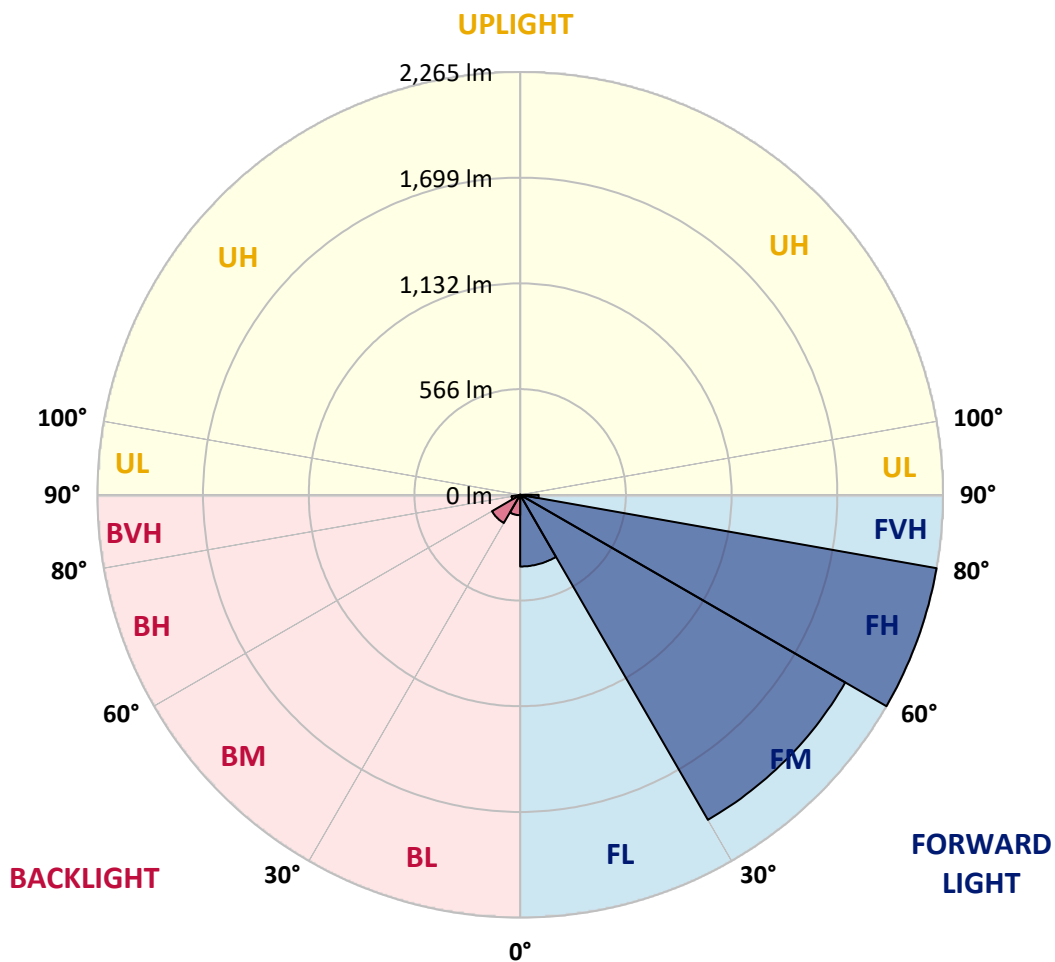
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	384.1	7.5			
FM	(30°-60°)	2010.5	39.5			
FH	(60°-80°)	2264.8	44.5			G2/5000
FVH	(80°-90°)	99.2	1.9			G1/100
BL	(0°-30°)	109.3	2.1	B0/110		
BM	(30°-60°)	174.6	3.4	B0/220		
BH	(60°-80°)	46.9	0.9	B0/110		G0/110
BVH	(80°-90°)	2.9	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	815.1	815.1	815.1	815.1	815.1	815.1	815.1	815.1	815.1	815.1	815.1
2.5°	867.9	869.5	867.5	863.9	858.7	855.5	851.1	841.5	829.4	819.1	807.0
5°	874.7	875.5	873.1	866.3	858.3	853.9	848.2	837.9	825.4	811.0	789.4
7.5°	876.7	876.3	873.5	865.1	852.6	847.1	837.5	824.7	811.8	798.6	774.2
10°	875.9	875.9	873.9	865.9	851.9	846.7	835.9	822.2	806.3	793.0	767.0
12.5°	873.1	874.7	873.5	869.1	858.7	854.7	845.1	831.5	816.2	802.6	775.0
15°	876.7	879.1	881.5	879.9	873.9	870.3	861.5	847.5	835.0	820.6	791.0
17.5°	891.1	896.3	901.9	902.3	895.9	889.5	879.5	865.1	853.0	839.8	807.8
20°	918.3	922.3	932.7	934.8	921.9	912.7	898.8	881.9	869.9	858.7	823.5
22.5°	958.8	963.2	971.6	968.7	947.2	936.3	918.7	899.5	887.1	880.7	841.5
25°	1020.0	1021.2	1023.3	1010.8	975.2	963.2	941.5	919.9	909.9	909.1	867.1
27.5°	1092.1	1093.6	1084.8	1057.2	1006.4	990.8	966.4	946.7	941.9	948.0	899.5
30°	1174.6	1175.0	1150.5	1105.7	1042.4	1025.2	1000.0	978.4	982.7	997.6	941.1
32.5°	1259.0	1255.0	1221.4	1162.9	1091.7	1070.8	1049.2	1027.7	1040.4	1070.4	1002.0
35°	1336.3	1334.6	1295.1	1226.9	1155.7	1137.3	1121.7	1098.9	1119.7	1168.5	1084.8
37.5°	1413.5	1412.3	1367.1	1296.2	1234.6	1221.4	1209.7	1192.1	1226.2	1297.8	1195.7
40°	1498.8	1496.8	1441.1	1373.1	1326.3	1319.1	1312.2	1304.7	1362.7	1462.4	1333.8
42.5°	1604.1	1595.3	1519.6	1456.8	1427.1	1429.2	1429.6	1437.1	1528.0	1658.1	1496.8
45°	1725.0	1705.4	1598.5	1546.4	1538.0	1550.1	1562.0	1593.7	1720.6	1883.5	1676.9
47.5°	1842.2	1810.6	1689.3	1642.9	1660.1	1684.9	1713.7	1775.4	1936.8	2119.2	1840.3
50°	1943.1	1910.7	1779.4	1741.0	1795.8	1832.6	1883.9	1977.2	2164.9	2318.6	1943.1
52.5°	2022.4	1996.8	1874.7	1849.1	1946.4	1996.8	2077.2	2199.8	2380.3	2450.0	2015.2
55°	2080.9	2068.0	1966.0	1969.6	2113.7	2186.6	2286.6	2425.1	2562.1	2552.1	2069.2
57.5°	2146.9	2136.9	2061.7	2111.7	2315.0	2409.2	2524.8	2636.1	2694.1	2634.1	2122.1
60°	2214.6	2217.8	2177.8	2283.8	2564.0	2668.2	2769.0	2796.6	2807.4	2717.4	2177.8
62.5°	2265.8	2279.4	2283.0	2469.6	2819.5	2908.4	2951.9	2932.3	2929.9	2829.1	2173.4
65°	2324.7	2360.3	2419.5	2673.3	3051.7	3110.1	3141.3	3169.7	3109.7	2862.3	1959.6
67.5°	2426.3	2482.4	2615.7	2923.1	3319.9	3406.3	3494.8	3464.7	3136.5	2524.8	1492.8
70°	2563.2	2631.6	2867.1	3249.4	3683.7	3828.6	3902.7	3441.1	2662.9	1744.5	787.5
72°	2476.8	2538.9	2944.8	3415.9	3941.5	4074.4	3889.1	3001.5	1930.3	904.3	263.8
72.5°	2392.7	2456.7	2919.9	3413.9	3967.1	4068.8	3800.6	2828.3	1708.1	703.8	181.8
75°	1660.1	1741.0	2503.2	3068.9	3582.5	3470.8	2907.9	1712.5	618.9	120.9	60.0
77.5°	858.3	920.8	1518.4	2168.6	2496.8	2286.6	1718.6	743.0	171.3	64.0	39.6
80°	532.0	562.8	710.1	1068.5	1297.0	1134.5	758.2	300.2	109.7	38.1	31.6
82.5°	275.4	299.0	447.1	431.2	479.2	398.3	279.8	251.4	67.6	23.6	32.4
85°	90.4	96.1	274.7	286.6	205.0	137.7	124.1	239.8	19.6	15.2	27.6
87.5°	12.0	14.0	96.5	164.1	100.9	62.4	74.5	84.5	6.9	8.4	7.6
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°	815.1	815.1	815.1	815.1	815.1	815.1	815.1	815.1	815.1	815.1	815.1
2.5°	799.0	793.8	777.4	761.0	742.2	725.0	711.4	702.6	706.6	693.4	695.4
5°	776.2	763.0	727.0	688.1	646.1	606.9	575.6	552.4	548.0	528.0	528.9
7.5°	754.2	732.5	674.1	610.1	540.4	484.0	432.7	387.9	371.9	355.5	345.9
10°	742.2	712.6	629.7	536.4	438.3	355.5	283.5	227.0	203.4	186.2	177.8
12.5°	745.8	706.6	596.5	469.5	340.6	235.4	160.1	118.9	104.4	96.5	93.7
15°	757.8	707.8	566.4	404.3	247.8	142.5	94.1	80.5	79.3	78.9	78.5
17.5°	769.1	709.0	534.8	336.2	165.7	90.8	75.7	74.5	74.5	74.5	74.5
20°	780.6	709.3	500.0	265.0	108.8	74.5	71.3	70.5	71.3	71.3	71.3
22.5°	794.2	712.2	466.4	195.8	80.5	70.1	68.0	67.6	68.0	68.0	67.6
25°	811.0	718.2	429.9	140.1	72.8	67.2	65.3	64.9	65.3	64.9	64.9
27.5°	833.5	726.2	387.5	100.5	69.7	64.4	62.4	62.4	62.4	62.1	62.1
30°	862.2	735.8	330.6	79.3	66.5	61.7	60.0	60.0	59.6	59.2	59.2
32.5°	903.5	751.4	268.6	71.6	62.8	58.0	56.5	56.9	56.5	56.1	55.6
35°	962.0	775.8	207.4	67.6	59.2	54.4	52.9	52.9	52.9	52.1	52.1
37.5°	1044.8	813.0	155.3	63.6	55.6	50.8	48.8	48.8	48.5	47.7	48.1
40°	1147.3	859.9	112.5	60.0	52.1	46.9	45.2	44.4	43.7	42.9	42.9
42.5°	1270.6	905.5	84.5	56.5	48.5	43.7	41.6	40.8	39.3	38.5	38.1
45°	1408.7	954.0	70.1	52.1	44.4	40.0	38.5	36.8	34.8	33.7	33.2
47.5°	1525.2	983.6	62.4	47.7	40.4	36.4	34.8	32.4	30.1	29.3	29.3
50°	1595.3	971.2	56.1	43.3	36.4	32.8	30.8	27.6	26.0	25.3	24.9
52.5°	1634.5	934.4	50.8	39.6	32.8	28.8	26.0	23.2	22.4	21.6	21.6
55°	1661.3	881.1	45.2	36.0	29.7	25.3	22.0	20.0	19.2	18.8	18.4
57.5°	1686.9	816.2	40.0	32.8	26.4	22.4	18.8	18.0	16.4	16.1	16.1
60°	1694.5	727.0	35.2	29.3	23.6	19.6	16.4	15.2	13.6	13.2	13.2
62.5°	1597.6	578.5	31.2	24.9	20.8	16.8	14.4	12.8	11.3	11.3	11.3
65°	1335.1	392.7	26.8	21.6	18.4	14.4	12.4	10.4	9.6	9.6	9.6
67.5°	930.0	219.0	22.8	18.4	15.7	12.0	10.4	8.8	8.4	8.8	8.8
70°	419.1	86.8	19.2	15.2	12.8	10.0	8.8	7.6	8.4	8.4	8.4
72°	125.7	46.4	16.1	12.4	10.4	8.8	7.6	7.2	8.0	8.4	8.4
72.5°	93.3	41.6	15.2	12.0	10.4	8.4	7.2	7.2	8.0	8.4	8.4
75°	48.1	28.4	11.6	8.8	7.6	6.9	6.0	6.9	8.0	8.0	8.0
77.5°	37.6	23.2	9.6	6.9	6.4	6.0	5.6	6.4	7.2	7.2	7.2
80°	35.2	15.2	7.6	6.4	5.6	5.2	5.2	5.6	6.4	6.9	6.9
82.5°	35.6	12.4	6.9	6.0	5.2	4.8	4.8	5.2	6.0	6.4	6.4
85°	22.8	8.4	6.0	5.2	4.8	4.4	4.4	4.8	5.6	6.0	6.0
87.5°	7.6	6.4	5.2	4.8	4.0	4.0	4.0	4.0	4.8	5.2	5.6
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)