

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: LUMARK

Report Number: P881940

Luminaire Tested: **NAV-SB1C-827-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881940
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-827-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4611 lumens
Efficiency: N/A
Efficacy: 84.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

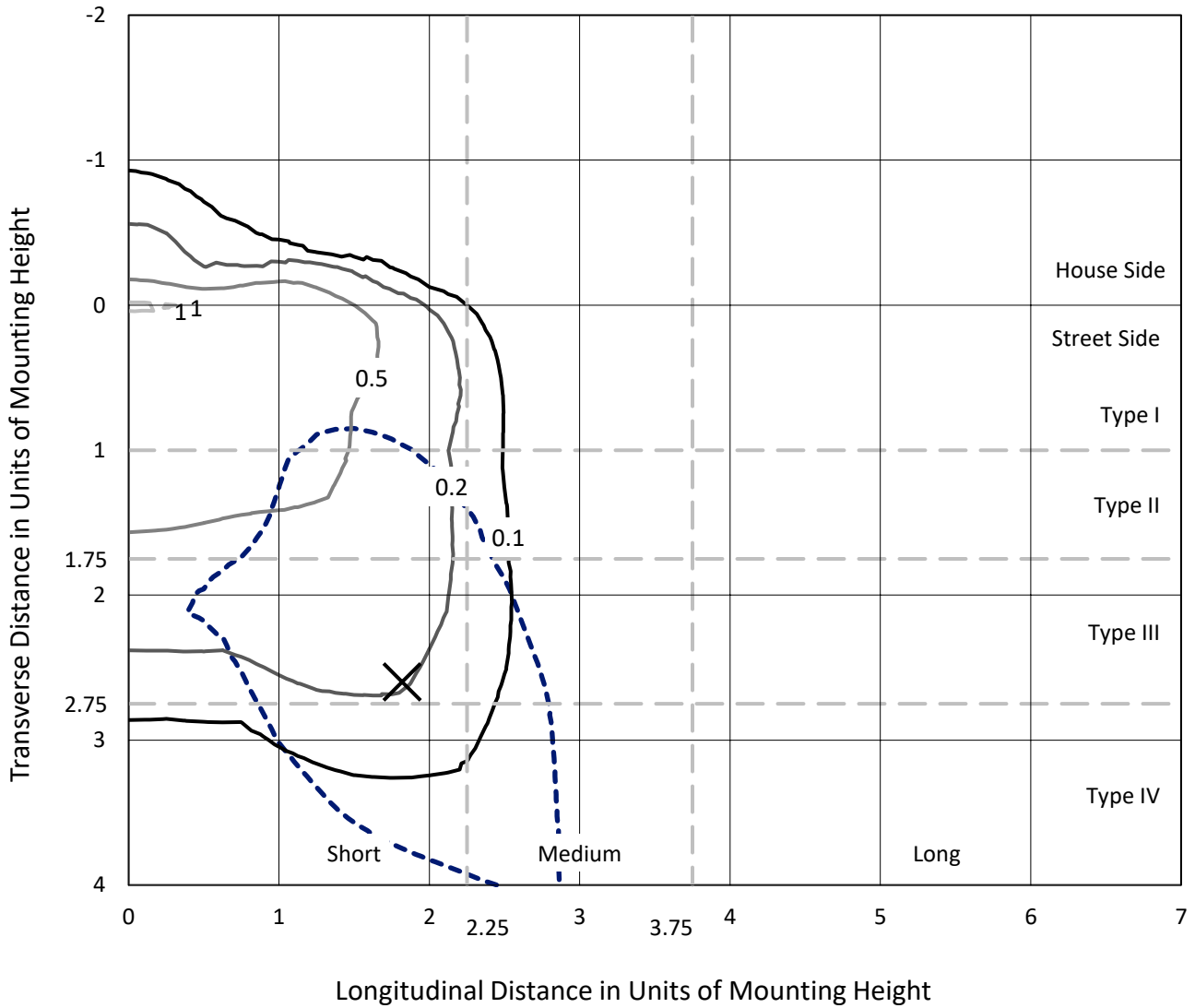
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881940
 CATALOG NUMBER: NAV-SB1C-827-U-T4FT-HSS

Iso-Footcandle Lines of Horizontal Illumination

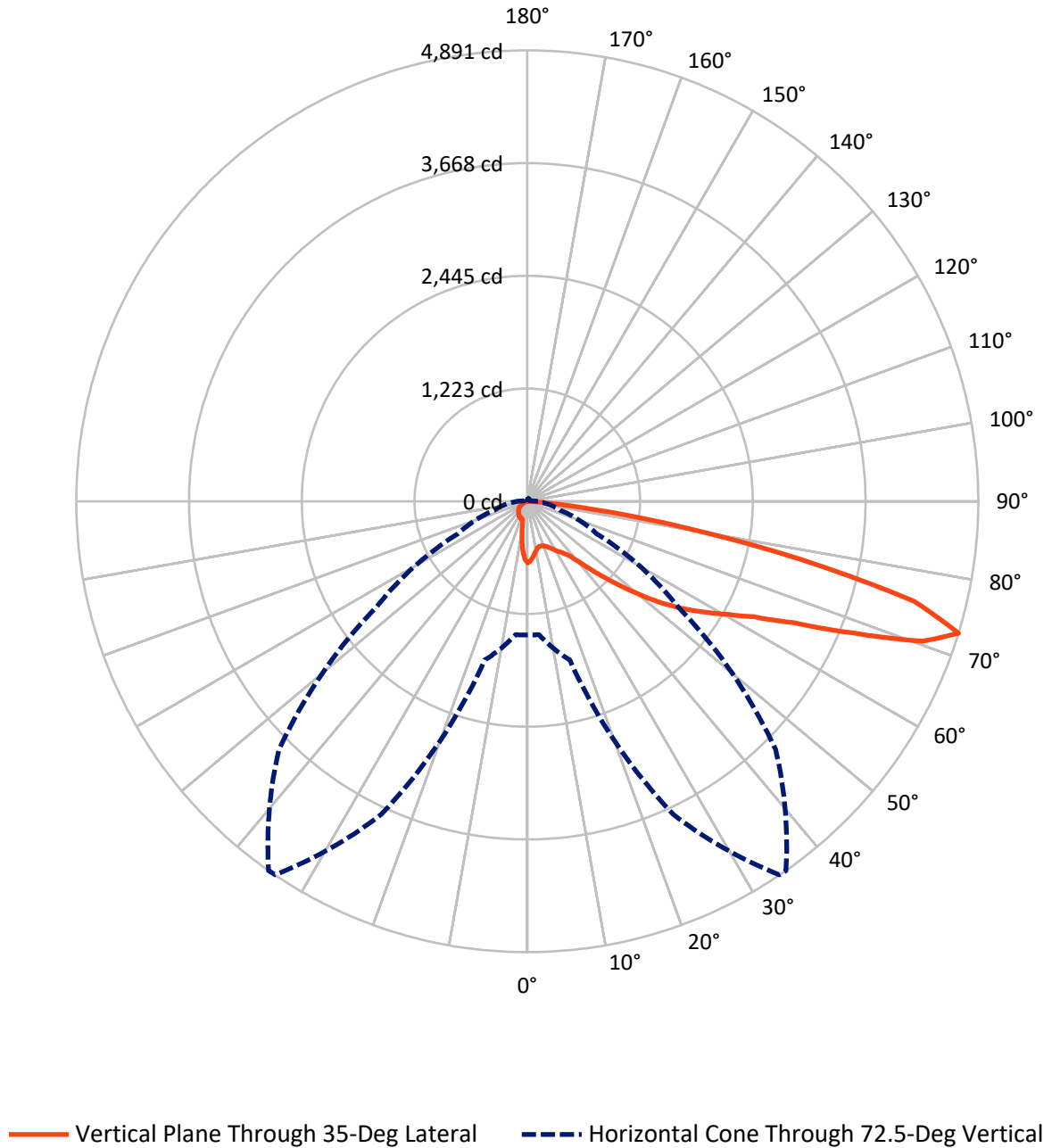
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type IV - Short - N/A

REPORT NUMBER: P881940
CATALOG NUMBER: NAV-SB1C-827-U-T4FT-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P881940
 CATALOG NUMBER: NAV-SB1C-827-U-T4FT-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	519.0	0.0	519.0
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	4092.1	0.0	4092.1
	% Fixture	88.7	0.0	88.7
Total	Lumens	4611.0	0.0	4611.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.9	1.2
10°-20°	128.5	2.8
20°-30°	208.7	4.5
30°-40°	348.2	7.6
40°-50°	658.8	14.3
50°-60°	1046.8	22.7
60°-70°	1295.0	28.1
70°-80°	805.0	17.5
80°-90°	65.1	1.4
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°	4611.0	100.0
0°-180°	4611.0	100.0

Coefficient of Utilization



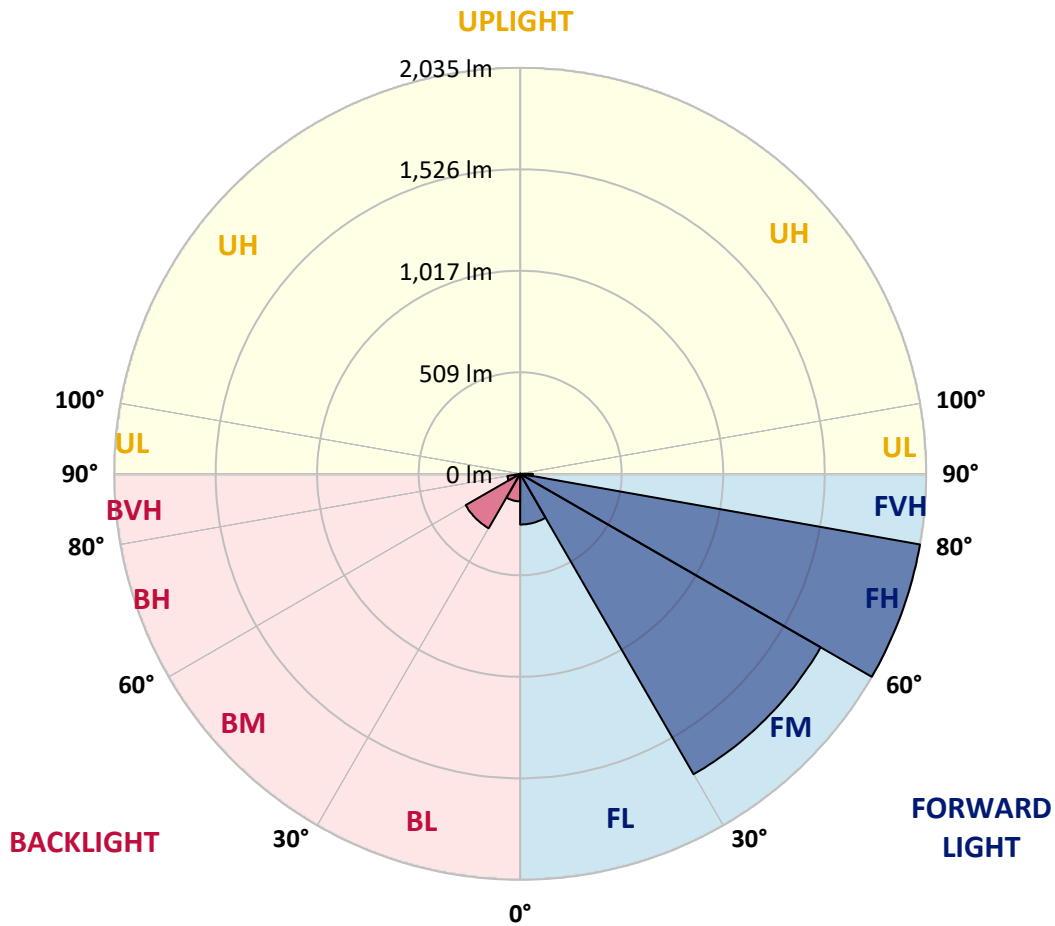
REPORT NUMBER: P881940
 CATALOG NUMBER: NAV-SB1C-827-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	254.2	5.5			
FM (30°-60°)	1738.8	37.7			
FH (60°-80°)	2034.9	44.1			G2/5000
FVH (80°-90°)	64.2	1.4			G1/100
BL (0°-30°)	137.9	3.0	B1/500		
BM (30°-60°)	315.0	6.8	B1/1000		
BH (60°-80°)	65.1	1.4	B0/110		G0/110
BVH (80°-90°)	0.9	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-G2

Type IV Short



REPORT NUMBER: P881940
 CATALOG NUMBER: NAV-SB1C-827-U-T4FT-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	668.3	668.3	668.3	668.3	668.3	668.3	668.3	668.3	668.3	668.3	668.3
2.5°	638.6	644.0	645.0	646.7	646.7	648.7	652.1	656.8	664.6	668.6	671.3
5°	588.6	592.6	597.7	601.7	609.5	610.5	623.7	636.5	654.4	668.0	677.4
7.5°	538.2	542.9	549.7	559.5	569.6	572.7	592.6	614.2	642.6	668.0	683.8
10°	502.7	503.1	509.2	519.0	535.2	538.9	563.2	594.0	629.4	663.9	689.9
12.5°	482.8	485.2	487.9	495.3	510.8	513.2	539.2	575.4	616.3	661.5	697.0
15°	482.8	484.5	486.2	489.9	502.4	504.4	527.4	563.6	609.5	662.5	708.5
17.5°	487.9	490.6	489.2	493.6	506.8	508.1	528.4	560.2	609.2	669.0	726.1
20°	500.0	502.1	499.4	502.1	515.2	517.9	538.9	566.6	614.9	680.1	748.0
22.5°	519.3	520.3	513.9	515.9	529.4	532.8	557.1	584.8	628.8	698.0	777.4
25°	543.6	545.6	535.8	538.2	551.1	555.1	583.1	612.2	650.7	722.7	814.9
27.5°	571.7	572.7	564.2	563.9	580.4	586.2	614.6	646.0	680.1	753.8	862.2
30°	603.8	606.8	598.7	597.3	618.3	623.0	651.1	687.5	723.4	800.4	929.5
32.5°	629.1	631.5	626.7	630.1	651.4	655.1	695.3	746.3	791.3	866.6	1021.0
35°	665.6	666.9	656.1	662.2	686.5	696.0	755.8	828.8	876.7	949.7	1140.6
37.5°	797.7	797.7	751.7	721.7	745.0	753.4	838.6	932.5	982.2	1061.2	1291.3
40°	980.5	977.4	910.2	848.7	845.7	862.2	956.5	1063.2	1118.3	1195.0	1460.9
42.5°	1175.4	1170.7	1079.1	1018.3	1008.2	1013.9	1092.6	1224.4	1280.5	1358.2	1643.4
45°	1348.4	1347.1	1263.3	1181.5	1163.3	1181.5	1262.6	1412.9	1453.1	1534.9	1825.5
47.5°	1493.3	1493.3	1432.2	1378.8	1369.3	1380.2	1492.7	1622.1	1618.4	1723.1	2002.8
50°	1660.2	1658.9	1600.8	1577.8	1587.6	1602.8	1757.6	1842.4	1789.3	1907.9	2161.3
52.5°	1777.1	1785.3	1765.3	1761.6	1811.6	1838.0	2026.5	2057.9	1942.4	2083.2	2279.9
55°	1869.7	1879.2	1902.2	1928.2	2024.5	2058.9	2287.0	2262.3	2070.4	2235.3	2348.1
57.5°	2000.8	1987.3	2022.8	2074.1	2229.9	2271.4	2539.4	2455.2	2173.5	2358.6	2355.6
60°	2159.9	2162.0	2168.1	2232.9	2435.0	2488.3	2788.0	2637.7	2239.7	2434.3	2273.1
62.5°	2351.2	2354.2	2366.7	2466.4	2710.3	2760.7	3052.9	2787.0	2270.1	2413.0	2060.3
65°	2338.0	2350.8	2490.4	2831.3	3128.9	3178.6	3362.1	2891.7	2224.1	2218.4	1677.5
67.5°	2129.9	2150.8	2384.3	3267.1	3760.1	3815.5	3735.7	2912.4	2025.8	1725.1	1094.3
70°	1856.9	1864.3	2145.1	3659.0	4490.8	4546.9	4070.2	2685.7	1537.3	962.2	490.2
72.5°	1450.1	1451.8	1781.2	3749.9	4887.5	4890.5	3807.7	1993.7	826.7	369.6	170.3
75°	1035.9	1025.7	1193.0	3041.1	4300.0	4334.4	2854.6	935.2	315.9	174.7	84.8
77.5°	555.4	566.6	675.0	1803.5	2970.5	3029.3	1557.5	269.6	160.8	118.9	56.1
80°	171.6	181.1	276.7	825.7	1682.5	1718.0	577.4	119.9	112.2	84.8	36.8
82.5°	54.1	56.1	129.1	347.0	698.4	714.6	167.2	67.9	76.7	56.1	21.6
85°	15.5	15.9	57.4	129.4	172.6	176.0	47.0	26.4	43.9	34.8	11.1
87.5°	1.7	5.4	21.6	21.6	15.2	14.9	5.1	5.7	12.5	4.4	2.0
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: P881940
 CATALOG NUMBER: NAV-SB1C-827-U-T4FT-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	668.3	668.3	668.3	668.3	668.3	668.3	668.3	668.3	668.3	668.3	668.3
2.5°	669.6	670.0	665.6	658.2	650.0	643.3	634.8	628.1	623.4	622.0	624.4
5°	674.4	672.0	659.5	636.9	609.8	586.5	560.5	539.9	526.4	520.6	522.7
7.5°	681.5	674.7	647.3	602.7	551.1	505.1	458.5	422.3	399.4	387.9	389.6
10°	687.5	674.0	627.1	553.4	474.4	404.8	341.9	298.3	274.0	262.5	262.9
12.5°	693.3	673.7	600.7	495.0	387.9	302.7	244.3	222.7	215.9	213.5	212.9
15°	704.1	674.7	567.6	428.1	301.7	228.7	207.4	207.1	208.5	207.8	207.4
17.5°	719.0	675.7	530.1	357.1	232.8	201.7	200.7	203.7	205.8	204.7	204.4
20°	738.2	679.8	490.2	286.8	200.0	194.9	197.3	200.0	201.7	200.0	199.7
22.5°	765.3	686.9	446.7	230.4	189.5	190.9	192.9	196.0	197.6	195.3	194.9
25°	798.4	698.0	403.7	200.4	184.5	186.2	189.2	192.6	194.6	192.2	191.9
27.5°	841.3	715.9	364.2	193.6	179.4	180.4	184.8	189.9	192.6	189.5	189.5
30°	903.4	745.3	330.1	196.6	176.4	174.0	180.1	187.2	190.2	187.5	187.2
32.5°	985.9	786.9	309.1	201.4	175.0	166.6	172.3	181.4	186.5	184.8	184.8
35°	1094.0	850.1	301.0	206.8	174.0	158.8	162.8	172.6	181.4	183.1	183.1
37.5°	1225.1	937.9	303.4	209.1	171.0	152.4	154.4	162.8	174.3	179.7	181.1
40°	1374.1	1040.3	316.9	206.8	167.6	147.0	147.3	153.7	163.9	172.0	174.7
42.5°	1527.8	1159.9	341.9	198.0	164.5	142.2	141.2	145.6	152.4	158.1	160.5
45°	1674.1	1282.9	366.6	185.8	160.8	137.5	135.1	136.8	138.2	140.6	141.9
47.5°	1801.8	1369.3	359.5	174.7	155.8	132.1	128.0	127.4	123.3	123.0	122.6
50°	1890.0	1388.3	319.3	163.5	148.3	126.0	119.6	115.5	108.5	105.1	105.4
52.5°	1918.0	1313.6	260.8	152.4	136.2	117.9	108.8	102.4	93.6	90.5	90.2
55°	1880.9	1167.3	208.5	138.9	119.3	107.1	97.0	88.5	81.4	77.7	77.7
57.5°	1790.0	981.1	164.9	123.0	101.4	94.9	84.8	76.4	70.3	66.6	65.9
60°	1639.3	779.1	130.4	104.1	86.5	81.8	71.3	65.9	60.5	56.1	55.1
62.5°	1410.6	556.1	102.4	82.4	72.3	66.9	60.8	56.8	50.3	44.3	43.2
65°	1100.8	340.2	79.1	60.5	58.1	55.4	51.7	48.0	40.2	34.1	33.1
67.5°	694.3	161.2	56.4	45.6	45.9	44.6	42.9	39.9	34.1	28.7	28.0
70°	305.8	78.0	37.2	34.8	34.1	34.1	35.5	34.5	29.1	24.0	23.0
72.5°	104.1	41.9	27.7	26.4	24.7	24.3	29.7	28.7	23.3	18.6	17.6
75°	54.4	28.0	20.3	18.9	14.9	17.9	23.7	22.3	16.6	12.2	11.1
77.5°	35.5	19.9	13.9	12.2	8.4	11.8	17.6	15.5	9.8	6.1	5.4
80°	22.3	13.2	8.1	5.7	4.1	6.4	9.5	6.8	3.7	1.4	1.0
82.5°	11.8	6.8	3.0	2.0	1.7	2.0	2.4	1.7	0.7	0.0	0.0
85°	4.7	2.4	1.0	0.7	0.3	0.0	0.7	0.3	0.0	0.0	0.0
87.5°	1.7	0.3	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)