

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: P960991

Luminaire Tested: **NAV-SB1D-827-U-SL2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960991
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-11)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-827-U-SL2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7353.3 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 79.6
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: 24 FT



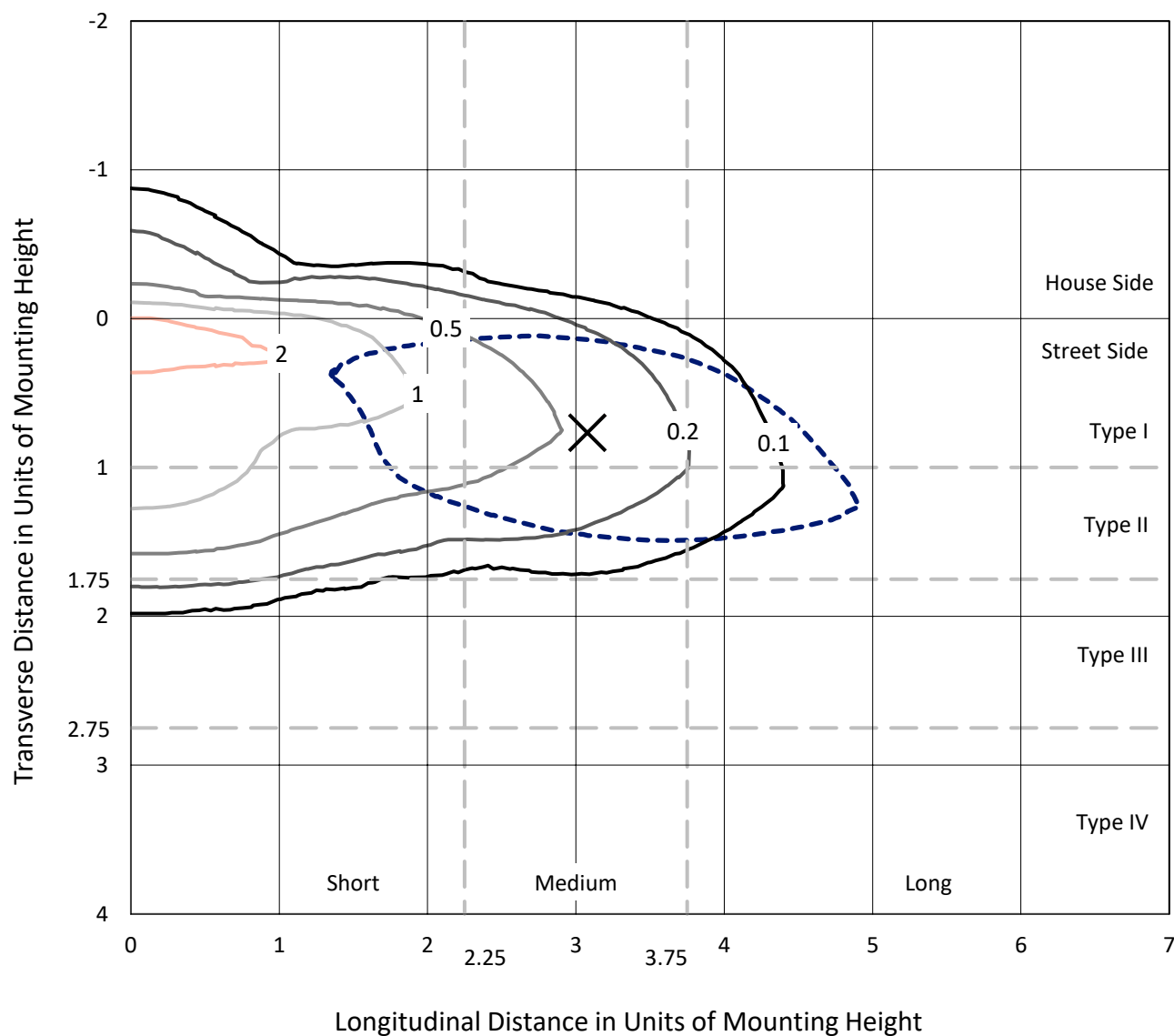
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

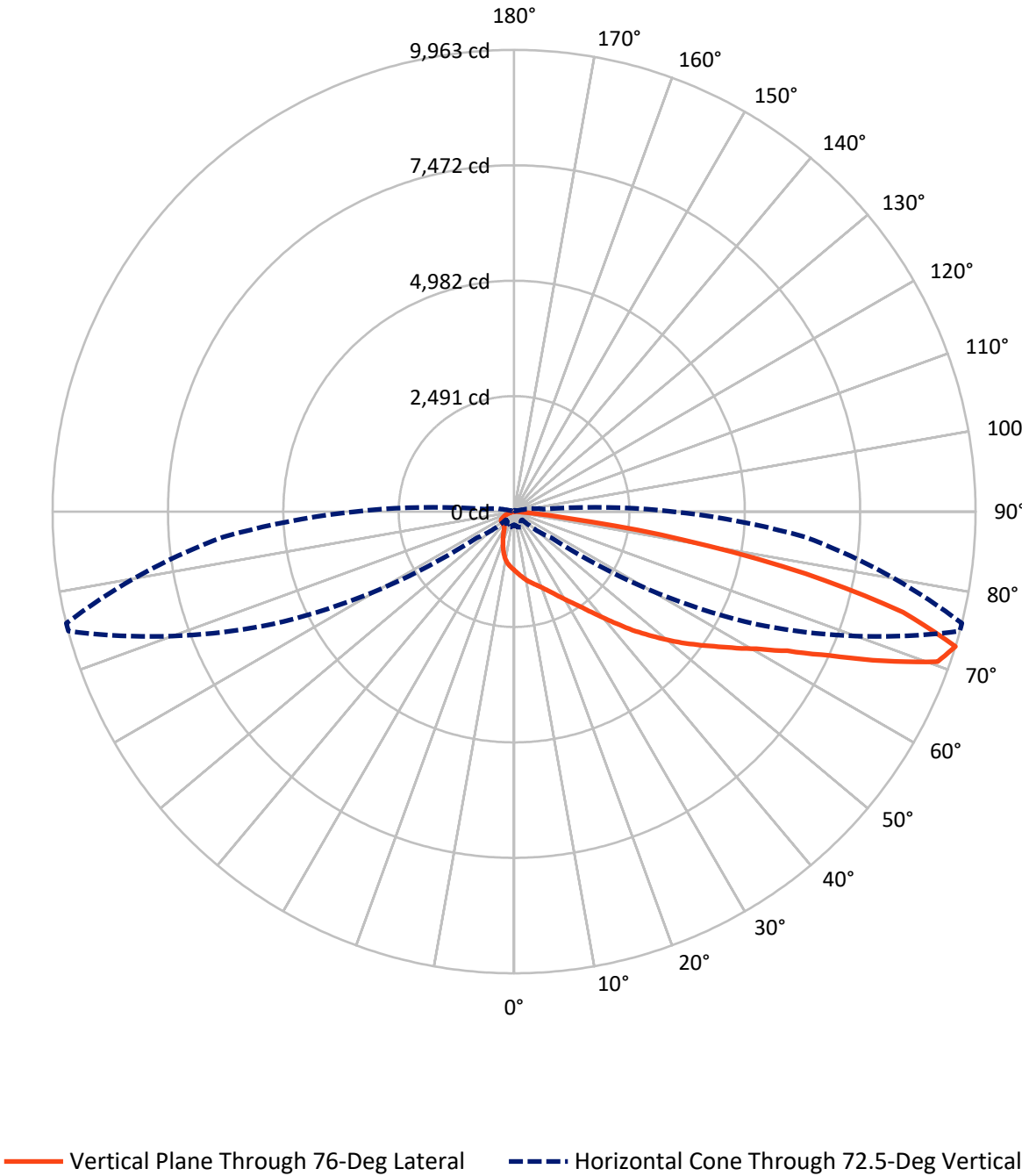
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	752.6	0.0	752.6
	% Fixture	10.2	0.0	10.2
Street Side	Lumens	6600.7	0.0	6600.7
	% Fixture	89.8	0.0	89.8
Total	Lumens	7353.3	0.0	7353.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.6	1.6
10°-20°	309.9	4.2
20°-30°	490.5	6.7
30°-40°	758.8	10.3
40°-50°	1152.5	15.7
50°-60°	1588.9	21.6
60°-70°	1678.5	22.8
70°-80°	1151.5	15.7
80°-90°	107.2	1.5
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°	7353.3	100.0
0°-180°	7353.3	100.0

Coefficient of Utilization



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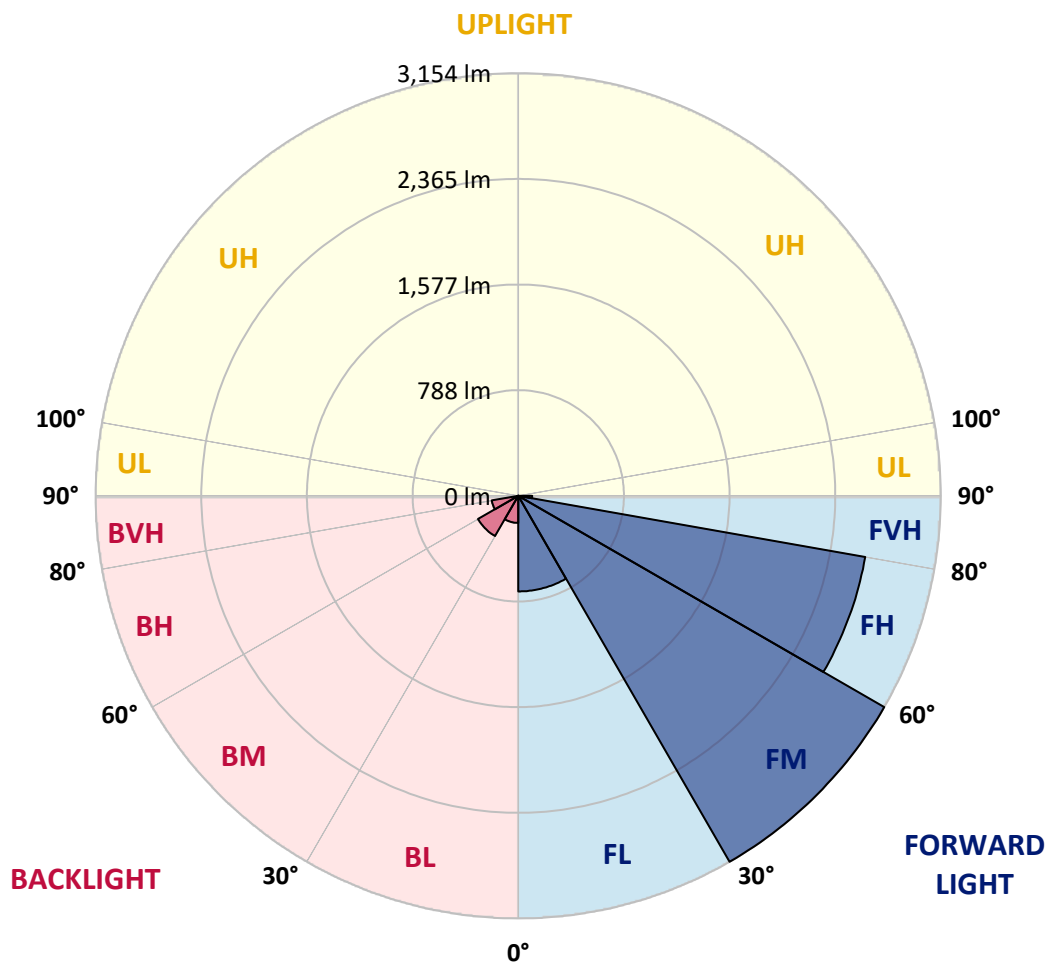
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	713.6	9.7			
FM	(30°-60°)	3153.7	42.9			
FH	(60°-80°)	2629.1	35.8			G2/5000
FVH	(80°-90°)	104.3	1.4			G2/225
BL	(0°-30°)	202.3	2.8	B1/500		
BM	(30°-60°)	346.5	4.7	B1/1000		
BH	(60°-80°)	200.9	2.7	B1/500		G1/500
BVH	(80°-90°)	2.9	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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1270.7	1270.7	1270.7	1270.7	1270.7	1270.7	1270.7	1270.7	1270.7	1270.7	1270.7
2.5°	1477.2	1457.8	1461.5	1442.0	1432.9	1410.9	1388.1	1358.0	1324.6	1324.6	1292.2
5°	1632.7	1620.3	1620.3	1597.5	1579.8	1545.5	1504.5	1451.5	1388.6	1382.3	1320.8
7.5°	1728.2	1720.6	1725.3	1712.0	1697.6	1661.8	1613.2	1544.1	1454.9	1447.2	1354.6
10°	1746.8	1746.3	1759.6	1763.5	1773.0	1754.9	1711.4	1631.8	1520.2	1509.2	1383.7
12.5°	1674.7	1665.7	1698.6	1737.3	1791.6	1815.9	1793.5	1712.0	1579.8	1564.6	1410.9
15°	1556.5	1558.3	1589.9	1649.4	1740.0	1826.9	1856.0	1790.2	1640.4	1622.3	1436.7
17.5°	1488.7	1481.5	1508.7	1562.2	1662.3	1784.9	1885.1	1863.1	1704.8	1684.3	1463.0
20°	1480.6	1480.1	1486.4	1510.6	1587.0	1724.9	1881.8	1934.3	1780.6	1756.7	1500.6
22.5°	1536.9	1536.0	1530.7	1525.9	1546.9	1666.1	1867.4	2001.9	1871.2	1845.5	1554.1
25°	1623.2	1621.8	1613.7	1584.5	1564.0	1634.7	1854.1	2065.0	1978.6	1950.0	1618.9
27.5°	1728.7	1727.6	1712.9	1669.0	1616.1	1637.5	1847.5	2129.8	2102.6	2074.5	1693.8
30°	1857.9	1856.0	1825.4	1763.5	1694.3	1682.8	1856.5	2202.8	2231.8	2210.4	1780.1
32.5°	2020.1	2014.8	1974.8	1881.3	1784.4	1743.4	1873.6	2277.7	2385.0	2365.0	1895.6
35°	2145.5	2137.4	2114.1	2031.5	1888.9	1817.8	1913.7	2366.4	2569.2	2551.4	2043.0
37.5°	2253.4	2245.3	2226.2	2158.4	2038.7	1912.8	1978.1	2484.7	2786.7	2778.1	2222.8
40°	2369.7	2356.4	2347.4	2274.8	2166.5	2049.7	2070.2	2623.0	3037.1	3038.0	2438.9
42.5°	2459.4	2454.2	2455.1	2399.3	2290.1	2211.8	2192.3	2779.0	3337.1	3346.1	2698.8
45°	2536.2	2532.0	2549.6	2510.4	2414.6	2318.2	2335.4	2955.5	3665.3	3683.8	2989.8
47.5°	2595.3	2600.1	2625.4	2600.1	2543.8	2393.1	2462.3	3145.8	4010.1	4012.5	3290.4
50°	2654.5	2656.4	2698.4	2686.0	2663.1	2488.0	2579.1	3358.5	4373.6	4377.9	3571.3
52.5°	2673.1	2670.2	2737.1	2767.5	2768.5	2605.3	2730.3	3590.4	4729.9	4743.7	3860.4
55°	2577.7	2585.8	2693.6	2817.6	2866.7	2767.5	2934.5	3883.7	5109.6	5115.4	4146.5
57.5°	2111.2	2156.0	2394.5	2682.1	2930.2	2999.9	3227.8	4226.7	5547.9	5542.7	4436.6
60°	1281.2	1334.7	1619.9	2249.6	2723.2	3233.1	3660.0	4758.0	6026.9	6012.0	4729.9
62.5°	716.5	732.7	823.8	1346.5	2071.1	3084.7	4082.2	5440.6	6669.9	6619.8	5018.5
65°	528.1	533.3	554.7	659.7	1017.9	2372.6	3989.6	6256.8	7573.3	7484.1	5364.3
67.5°	458.9	464.1	485.1	499.4	454.6	1246.4	3287.0	6709.4	8720.5	8603.6	5832.2
70°	386.3	389.2	423.1	432.7	325.3	474.2	2111.7	6569.7	9782.3	9698.8	6334.5
72.5°	288.1	299.5	348.7	371.6	261.0	251.8	994.0	5744.0	9962.1	9963.1	6300.7
75°	195.6	206.0	262.4	305.8	201.3	176.5	401.2	4289.2	8674.7	8674.7	5523.1
77.5°	133.6	142.2	182.7	240.0	152.6	121.2	208.0	2722.2	6223.4	6442.3	3936.6
80°	59.1	64.4	117.8	174.1	115.9	78.2	117.8	1490.7	3763.5	3717.3	1543.1
82.5°	29.1	33.4	75.3	108.8	74.9	48.2	62.0	708.8	1219.6	1159.1	240.9
85°	5.7	7.6	40.6	46.2	34.8	21.4	23.4	218.0	146.9	167.9	51.0
87.5°	0.0	0.0	12.4	8.6	3.8	4.8	4.8	19.6	11.5	13.3	13.3
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°	1270.7	1270.7	1270.7	1270.7	1270.7	1270.7	1270.7	1270.7	1270.7	1270.7	1270.7
2.5°	1275.0	1257.4	1218.7	1180.6	1141.4	1105.7	1080.9	1056.1	1040.8	1034.1	1035.0
5°	1285.0	1249.3	1168.2	1083.2	999.3	917.3	855.8	798.1	779.9	749.9	751.7
7.5°	1300.7	1242.6	1114.8	971.6	835.3	715.0	628.2	559.0	531.4	504.7	504.2
10°	1311.3	1230.2	1044.2	852.9	668.3	533.3	450.3	400.2	382.1	365.8	365.4
12.5°	1315.6	1207.2	963.1	719.8	519.9	406.4	356.8	333.4	327.2	321.5	321.5
15°	1319.4	1184.9	872.5	591.5	410.7	340.1	320.5	312.9	308.6	304.8	304.8
17.5°	1322.8	1156.2	769.0	480.8	346.8	313.3	303.8	295.7	292.4	288.1	288.1
20°	1334.1	1128.6	676.4	396.9	311.9	294.3	283.8	275.2	272.3	269.5	270.0
22.5°	1355.7	1106.2	586.7	340.1	291.0	274.7	261.4	251.8	250.0	248.0	246.6
25°	1381.4	1078.5	502.2	303.4	270.5	252.4	237.6	229.4	227.6	228.0	227.0
27.5°	1414.3	1048.0	429.8	280.0	252.4	231.3	214.6	208.5	209.4	211.4	210.3
30°	1450.6	1019.8	373.0	263.7	236.2	212.8	196.1	191.8	195.1	197.9	197.0
32.5°	1504.5	995.0	333.4	250.9	221.8	197.5	184.1	178.9	182.7	186.5	185.5
35°	1577.9	982.6	311.0	240.0	209.4	185.5	172.2	168.4	172.2	173.1	172.7
37.5°	1668.1	981.6	301.5	230.8	197.9	175.6	160.7	159.3	162.2	162.7	161.7
40°	1784.4	987.9	294.3	224.2	186.0	164.1	150.3	148.8	149.8	153.1	152.6
42.5°	1931.8	1013.6	284.3	215.6	173.1	152.6	141.7	138.4	137.9	141.7	141.1
45°	2116.9	1070.4	270.9	201.7	161.7	143.1	132.1	128.3	126.9	127.8	129.3
47.5°	2318.7	1140.0	257.6	188.9	153.5	135.5	124.5	119.7	117.4	117.4	117.4
50°	2514.2	1218.7	248.6	175.6	147.9	128.3	116.3	111.6	107.8	106.8	106.4
52.5°	2707.9	1296.0	241.4	162.2	141.1	119.2	108.8	103.5	99.2	97.3	96.4
55°	2884.5	1369.5	229.0	149.3	132.6	109.7	101.2	95.8	90.6	87.3	85.9
57.5°	3053.8	1430.5	206.0	135.9	119.2	100.7	93.0	87.3	81.1	76.8	74.9
60°	3207.8	1462.0	177.4	121.7	105.9	91.1	83.9	78.7	70.6	63.4	61.5
62.5°	3325.2	1449.6	146.5	105.4	92.0	82.5	73.5	68.2	58.6	50.1	46.7
65°	3445.3	1381.9	116.8	88.3	80.6	71.0	61.5	56.3	45.3	36.3	33.8
67.5°	3601.3	1237.4	92.0	73.5	69.6	56.3	48.2	44.8	37.2	28.6	26.8
70°	3701.5	961.1	71.5	59.7	57.2	41.0	37.2	36.7	29.6	21.9	19.6
72.5°	3426.8	630.1	54.8	45.3	41.0	26.8	28.6	28.6	21.4	14.8	12.9
75°	2860.6	368.7	39.6	32.4	23.4	17.2	19.6	19.6	13.3	7.2	5.7
77.5°	2043.0	196.5	26.2	20.0	11.9	7.6	10.5	10.0	4.3	0.5	0.0
80°	781.4	67.8	12.4	8.1	3.4	1.4	0.9	0.5	0.5	0.0	0.0
82.5°	119.2	17.6	2.4	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	21.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.8	0.0	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)