

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: P962996

Luminaire Tested: **NAV-SB2D-735-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962996
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2D-735-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15793.2 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 147.6
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



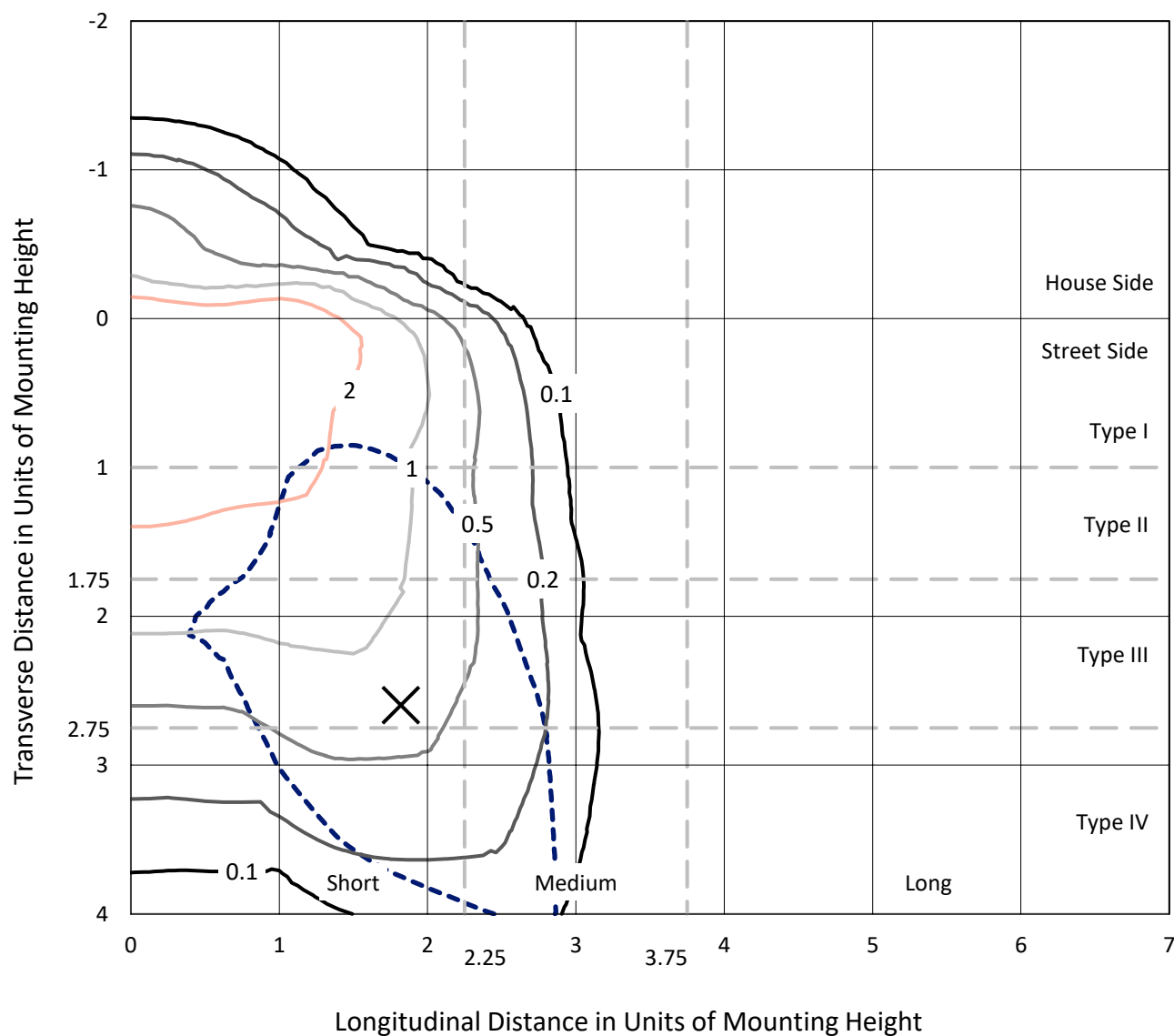
REPORT NUMBER: P962996

CATALOG NUMBER: NAV-SB2D-735-U-T4FT-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

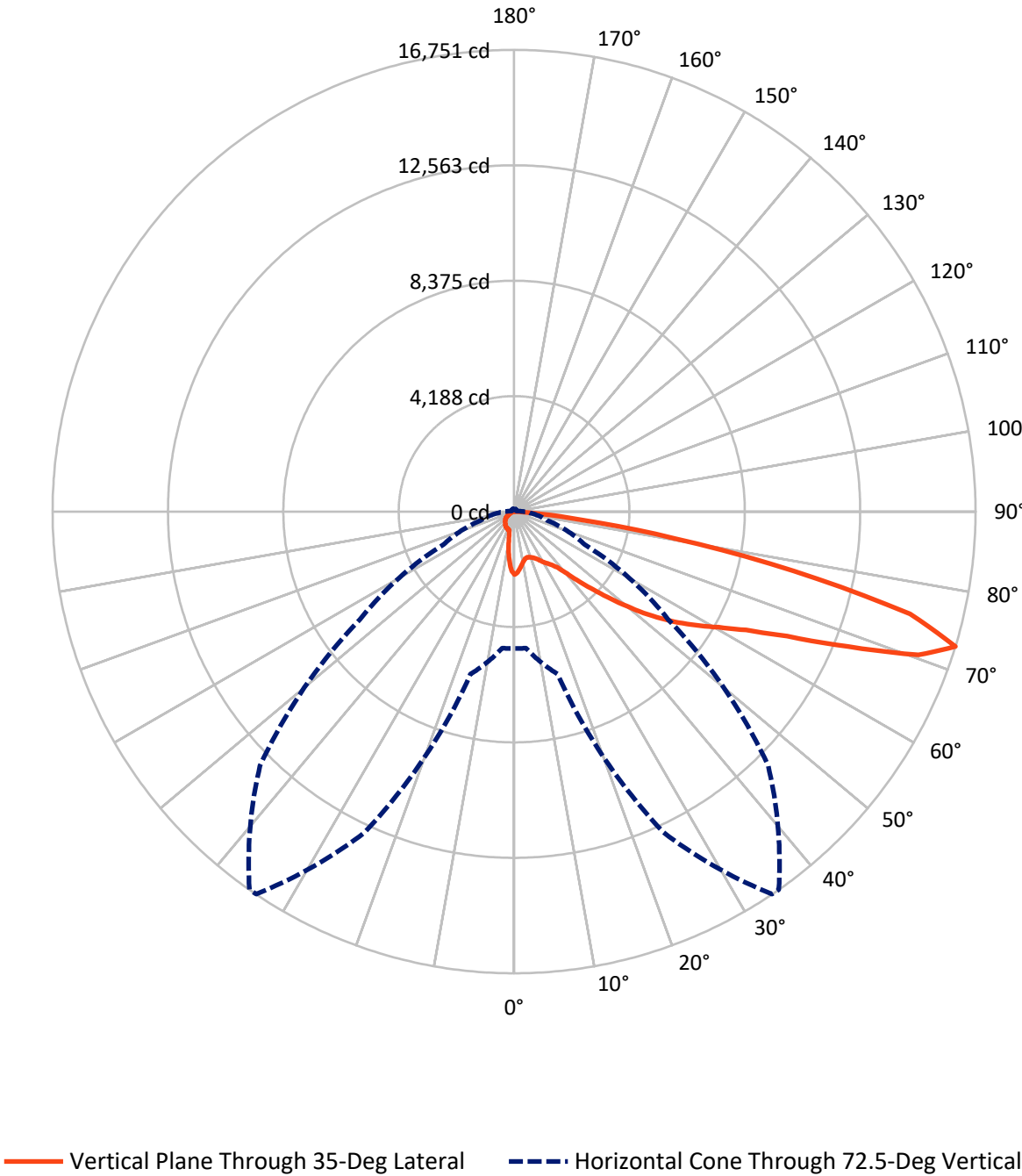


Based on 25 foot mounting height. Maximum calculated value = 3.7 fc

Type IV - Short - N/A

REPORT NUMBER: P962996
CATALOG NUMBER: NAV-SB2D-735-U-T4FT-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P962996

CATALOG NUMBER: NAV-SB2D-735-U-T4FT-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1777.4	0.0	1777.4
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	14015.7	0.0	14015.7
	% Fixture	88.7	0.0	88.7
Total	Lumens	15793.2	0.0	15793.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.1	1.2
10°-20°	440.0	2.8
20°-30°	714.8	4.5
30°-40°	1192.6	7.6
40°-50°	2256.5	14.3
50°-60°	3585.6	22.7
60°-70°	4435.6	28.1
70°-80°	2757.2	17.5
80°-90°	222.8	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°	15793.2	100.0
0°-180°	15793.2	100.0

Coefficient of Utilization



REPORT NUMBER: P962996

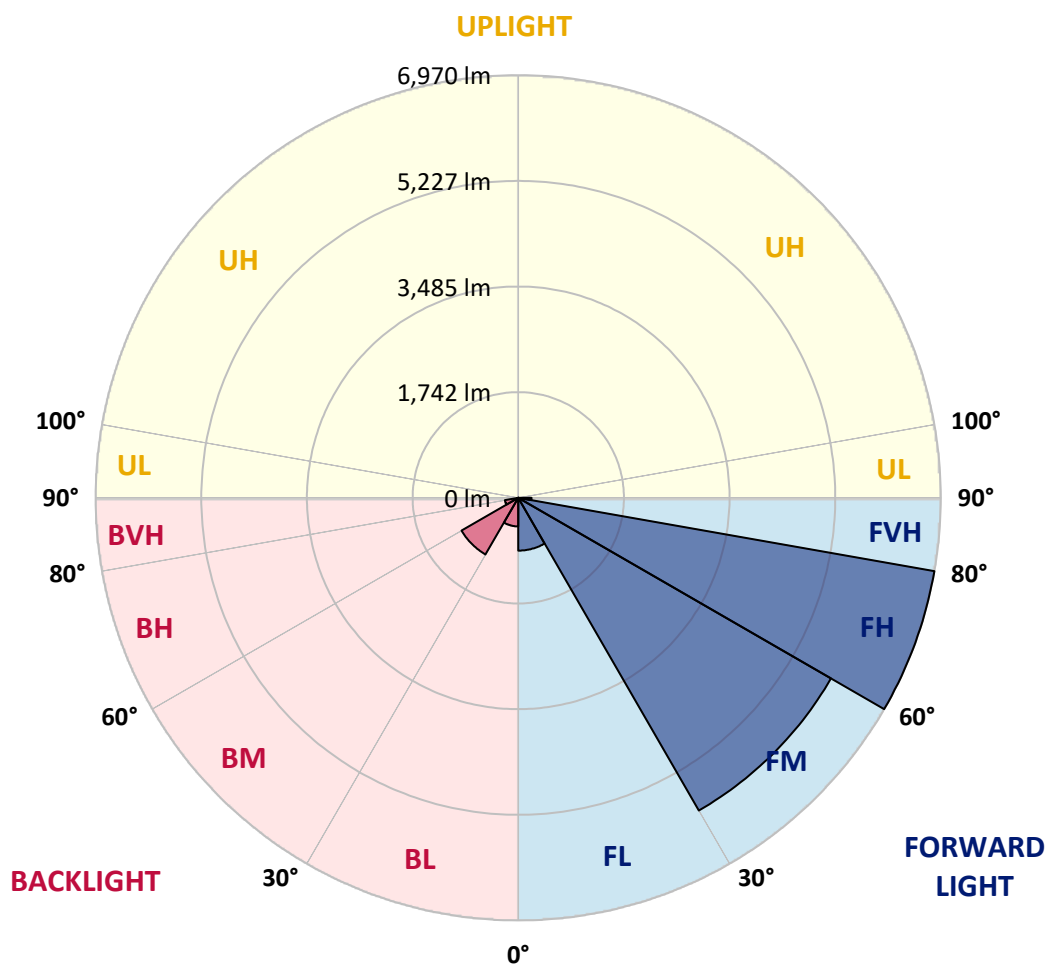
CATALOG NUMBER: NAV-SB2D-735-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	870.6	5.5			
FM	(30°-60°)	5955.6	37.7			
FH	(60°-80°)	6969.7	44.1			G3/7500
FVH	(80°-90°)	219.8	1.4			G2/225
BL	(0°-30°)	472.3	3.0	B1/500		
BM	(30°-60°)	1079.1	6.8	B2/2500		
BH	(60°-80°)	223.0	1.4	B1/500		G1/500
BVH	(80°-90°)	3.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short



REPORT NUMBER: P962996

CATALOG NUMBER: NAV-SB2D-735-U-T4FT-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	2288.9	2288.9	2288.9	2288.9	2288.9	2288.9	2288.9	2288.9	2288.9	2288.9	2288.9
2.5°	2187.1	2205.6	2209.1	2214.9	2214.9	2221.9	2233.4	2249.7	2276.2	2290.2	2299.4
5°	2015.9	2029.7	2047.1	2061.0	2087.6	2091.1	2136.2	2180.2	2241.5	2287.8	2320.2
7.5°	1843.5	1859.7	1882.8	1916.3	1951.1	1961.4	2029.7	2103.8	2201.0	2287.8	2342.2
10°	1721.9	1723.1	1743.9	1777.5	1833.0	1845.7	1929.0	2034.4	2155.9	2274.0	2363.0
12.5°	1653.6	1661.7	1671.1	1696.5	1749.7	1757.8	1846.9	1970.8	2110.8	2265.9	2387.3
15°	1653.6	1659.5	1665.2	1677.9	1720.8	1727.7	1806.4	1930.2	2087.6	2269.2	2426.7
17.5°	1671.1	1680.3	1675.7	1690.6	1735.8	1740.4	1809.8	1918.7	2086.5	2291.3	2486.9
20°	1712.7	1719.6	1710.3	1719.6	1764.7	1774.0	1845.7	1940.6	2106.2	2329.5	2562.1
22.5°	1778.7	1782.1	1760.1	1767.1	1813.3	1824.9	1908.2	2003.2	2153.5	2390.8	2662.7
25°	1861.9	1868.9	1835.4	1843.5	1887.4	1901.3	1997.3	2096.8	2228.8	2475.3	2791.2
27.5°	1958.0	1961.4	1932.5	1931.4	1988.1	2007.8	2104.9	2212.6	2329.5	2581.8	2953.2
30°	2067.9	2078.4	2050.6	2045.9	2117.6	2133.9	2230.0	2354.9	2477.6	2741.5	3183.4
32.5°	2154.8	2162.9	2146.7	2158.2	2231.1	2243.8	2381.6	2556.2	2710.2	2968.3	3497.1
35°	2279.7	2284.3	2247.3	2268.1	2351.5	2383.8	2588.6	2838.6	3002.9	3252.9	3906.8
37.5°	2732.1	2732.1	2574.8	2471.8	2551.6	2580.5	2872.2	3193.9	3364.0	3634.8	4422.9
40°	3358.2	3347.9	3117.5	2906.9	2896.5	2953.2	3276.1	3641.7	3830.3	4093.0	5003.7
42.5°	4025.9	4009.7	3696.2	3487.9	3453.1	3472.8	3742.4	4193.7	4385.9	4652.0	5628.7
45°	4618.4	4613.8	4326.8	4046.8	3984.3	4046.8	4324.5	4839.4	4977.2	5257.2	6252.4
47.5°	5114.9	5114.9	4905.4	4722.6	4690.2	4727.2	5112.6	5555.8	5543.0	5901.7	6859.9
50°	5686.5	5681.9	5482.8	5404.2	5437.7	5489.8	6019.8	6310.3	6128.6	6534.8	7402.7
52.5°	6087.0	6114.7	6046.5	6033.7	6204.9	6295.2	6941.0	7048.6	6652.8	7135.3	7808.9
55°	6404.0	6436.4	6515.1	6604.2	6934.0	7052.0	7833.2	7748.7	7091.4	7656.1	8042.7
57.5°	6853.0	6806.7	6928.2	7104.1	7637.6	7780.0	8697.6	8409.4	7444.4	8078.5	8068.1
60°	7398.0	7405.0	7425.8	7648.0	8340.0	8522.9	9549.3	9034.3	7671.2	8337.7	7785.7
62.5°	8053.0	8063.5	8106.3	8447.6	9283.1	9455.6	10456.5	9545.8	7775.3	8264.8	7056.7
65°	8007.9	8051.9	8529.8	9697.4	10716.9	10887.0	11515.4	9904.6	7617.9	7598.2	5745.5
67.5°	7295.0	7366.8	8166.5	11190.2	12878.6	13068.3	12795.3	9975.2	6938.6	5908.7	3748.2
70°	6360.0	6385.4	7347.1	12532.6	15381.7	15573.7	13940.9	9198.7	5265.3	3295.8	1679.2
72.5°	4966.7	4972.6	6100.8	12843.9	16740.2	16750.7	13041.8	6828.8	2831.7	1266.0	583.2
75°	3548.0	3513.3	4086.2	10416.0	14727.8	14845.9	9777.3	3203.1	1082.0	598.3	290.5
77.5°	1902.5	1940.6	2312.1	6177.2	10174.3	10375.6	5334.7	923.4	550.8	407.3	192.1
80°	587.8	620.2	947.7	2828.2	5763.0	5884.4	1977.6	410.8	384.2	290.5	126.2
82.5°	185.1	192.1	442.1	1188.5	2391.9	2447.5	572.8	232.6	262.7	192.1	74.1
85°	53.2	54.4	196.7	443.2	591.3	602.9	160.8	90.3	150.5	119.2	38.2
87.5°	5.7	18.6	74.1	74.1	52.1	50.9	17.3	19.7	42.8	15.1	7.0
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: P962996

CATALOG NUMBER: NAV-SB2D-735-U-T4FT-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2288.9	2288.9	2288.9	2288.9	2288.9	2288.9	2288.9	2288.9	2288.9	2288.9	2288.9
2.5°	2293.6	2294.8	2279.7	2254.3	2226.5	2203.3	2174.4	2151.3	2135.1	2130.5	2138.6
5°	2309.8	2301.7	2258.9	2181.3	2088.7	2008.9	1919.8	1849.2	1803.0	1783.3	1790.2
7.5°	2334.1	2311.0	2217.2	2064.5	1887.4	1730.0	1570.3	1446.5	1367.9	1328.5	1334.2
10°	2354.9	2308.6	2147.8	1895.5	1624.7	1386.3	1171.1	1021.8	938.5	899.1	900.4
12.5°	2374.6	2307.5	2057.5	1695.4	1328.5	1036.9	836.7	762.6	739.4	731.3	729.1
15°	2411.6	2311.0	1944.1	1466.2	1033.4	783.4	710.5	709.4	714.0	711.7	710.5
17.5°	2462.6	2314.4	1815.7	1223.1	797.3	690.8	687.4	697.8	704.8	701.3	700.1
20°	2528.5	2328.3	1679.2	982.5	685.1	667.7	675.8	685.1	690.8	685.1	683.9
22.5°	2621.1	2352.6	1529.8	789.2	649.2	653.8	660.8	671.2	677.0	668.9	667.7
25°	2734.5	2390.8	1382.8	686.2	631.8	637.7	648.0	659.6	666.6	658.5	657.3
27.5°	2881.5	2452.1	1247.4	663.1	614.5	618.0	633.0	650.4	659.6	649.2	649.2
30°	3094.4	2552.8	1130.6	673.5	604.0	595.9	616.7	641.1	651.5	642.3	641.1
32.5°	3376.8	2695.1	1058.8	689.7	599.4	570.5	590.2	621.5	638.8	633.0	633.0
35°	3747.1	2911.5	1031.0	708.2	595.9	543.9	557.8	591.3	621.5	627.2	627.2
37.5°	4196.0	3212.5	1039.1	716.3	585.6	521.9	528.8	557.8	597.2	615.6	620.2
40°	4706.4	3563.1	1085.5	708.2	574.0	503.4	504.5	526.5	561.3	589.1	598.3
42.5°	5232.9	3972.7	1171.1	678.1	563.5	487.2	483.7	498.8	521.9	541.6	549.7
45°	5734.0	4394.0	1255.6	636.4	550.8	471.0	462.9	468.6	473.3	481.4	486.1
47.5°	6171.4	4690.2	1231.2	598.3	533.5	452.4	438.6	436.2	422.4	421.3	420.0
50°	6473.5	4755.0	1093.6	560.1	508.0	431.6	409.7	395.8	371.5	359.9	361.0
52.5°	6569.5	4499.2	893.4	521.9	466.4	403.8	372.6	350.7	320.5	310.2	308.9
55°	6442.2	3998.1	714.0	475.6	408.5	366.8	332.1	303.2	278.9	266.2	266.2
57.5°	6130.9	3360.6	564.7	421.3	347.2	325.1	290.5	261.6	240.7	228.0	225.7
60°	5614.7	2668.5	446.7	356.4	296.2	280.0	244.2	225.7	207.2	192.1	188.6
62.5°	4831.3	1904.8	350.7	282.4	247.6	229.1	208.3	194.4	172.4	151.6	148.1
65°	3770.2	1165.3	270.8	207.2	199.1	189.8	177.0	164.3	137.7	116.8	113.4
67.5°	2378.1	552.0	193.2	156.2	157.3	152.7	147.0	136.5	116.8	98.4	96.0
70°	1047.2	267.3	127.3	119.2	116.8	116.8	121.5	118.1	99.5	82.2	78.7
72.5°	356.4	143.5	94.9	90.3	84.5	83.3	101.9	98.4	79.8	63.7	60.2
75°	186.3	96.0	69.4	64.8	50.9	61.3	81.0	76.4	56.7	41.6	38.2
77.5°	121.5	68.3	47.5	41.6	28.9	40.5	60.2	53.2	33.5	20.8	18.6
80°	76.4	45.1	27.8	19.7	13.8	22.0	32.4	23.2	12.7	4.6	3.5
82.5°	40.5	23.2	10.5	7.0	5.7	7.0	8.1	5.7	2.4	0.0	0.0
85°	16.2	8.1	3.5	2.4	1.1	0.0	2.4	1.1	0.0	0.0	0.0
87.5°	5.7	1.1	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)