

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: P962068

Luminaire Tested: **NAV-SB2B-827-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962068
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-827-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7731.6 lumens
Efficiency: N/A
Efficacy: 104.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

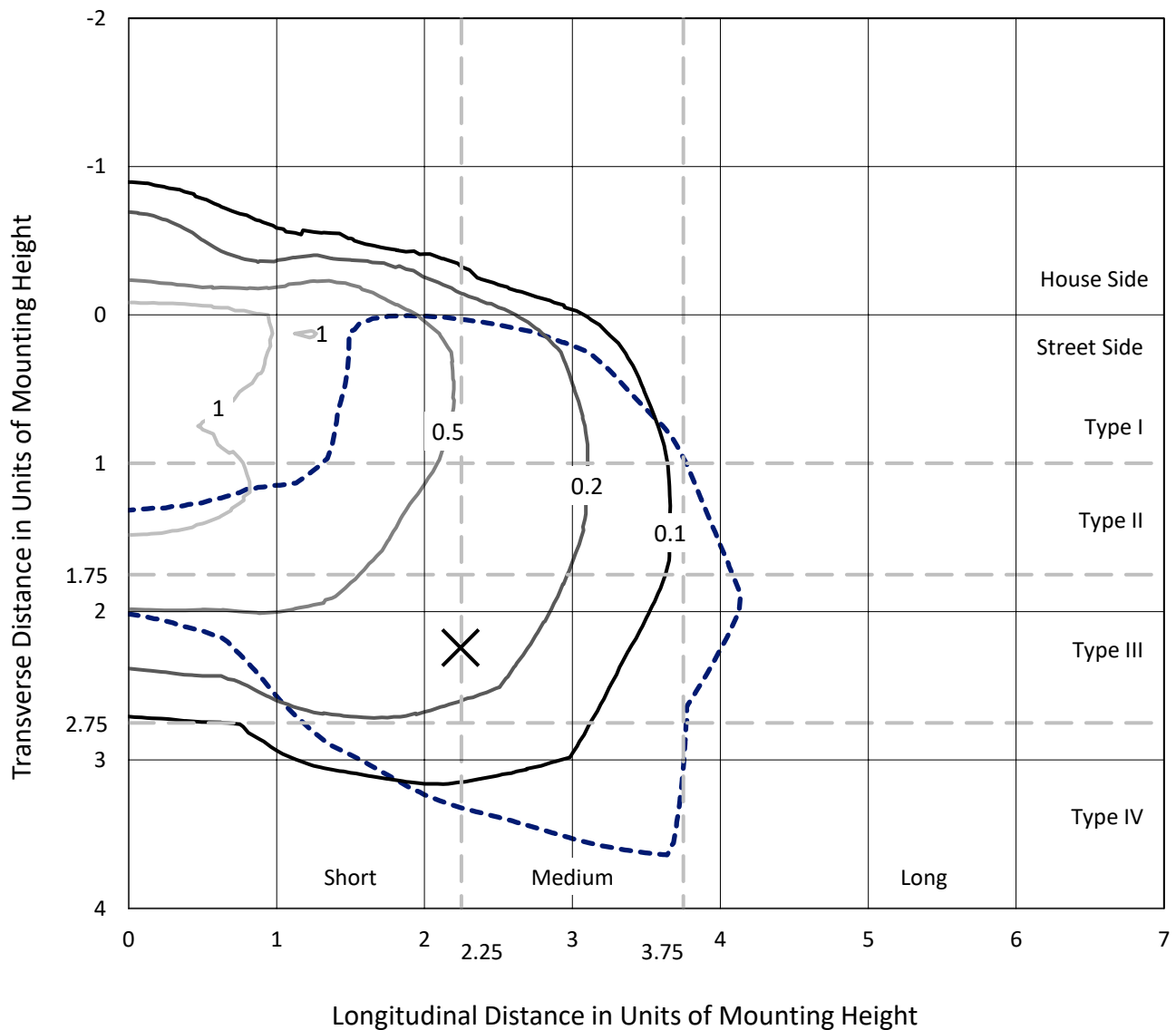
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

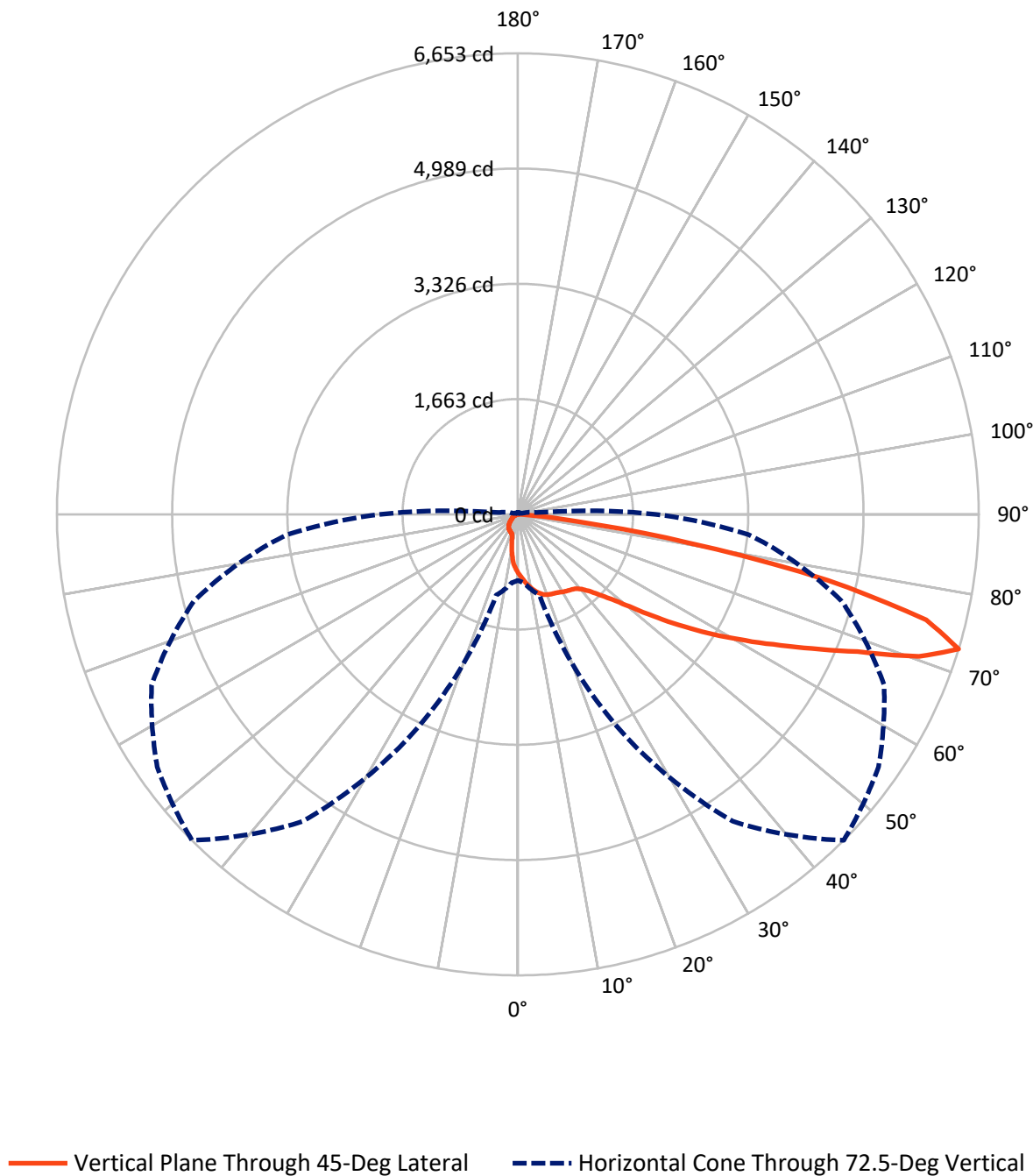
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	812.4	0.0	812.4
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	6919.2	0.0	6919.2
	% Fixture	89.5	0.0	89.5
Total	Lumens	7731.6	0.0	7731.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.8	1.0
10°-20°	233.2	3.0
20°-30°	383.0	5.0
30°-40°	543.2	7.0
40°-50°	897.9	11.6
50°-60°	1612.9	20.9
60°-70°	2239.6	29.0
70°-80°	1624.5	21.0
80°-90°	117.4	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°	7731.6	100.0
0°-180°	7731.6	100.0

Coefficient of Utilization



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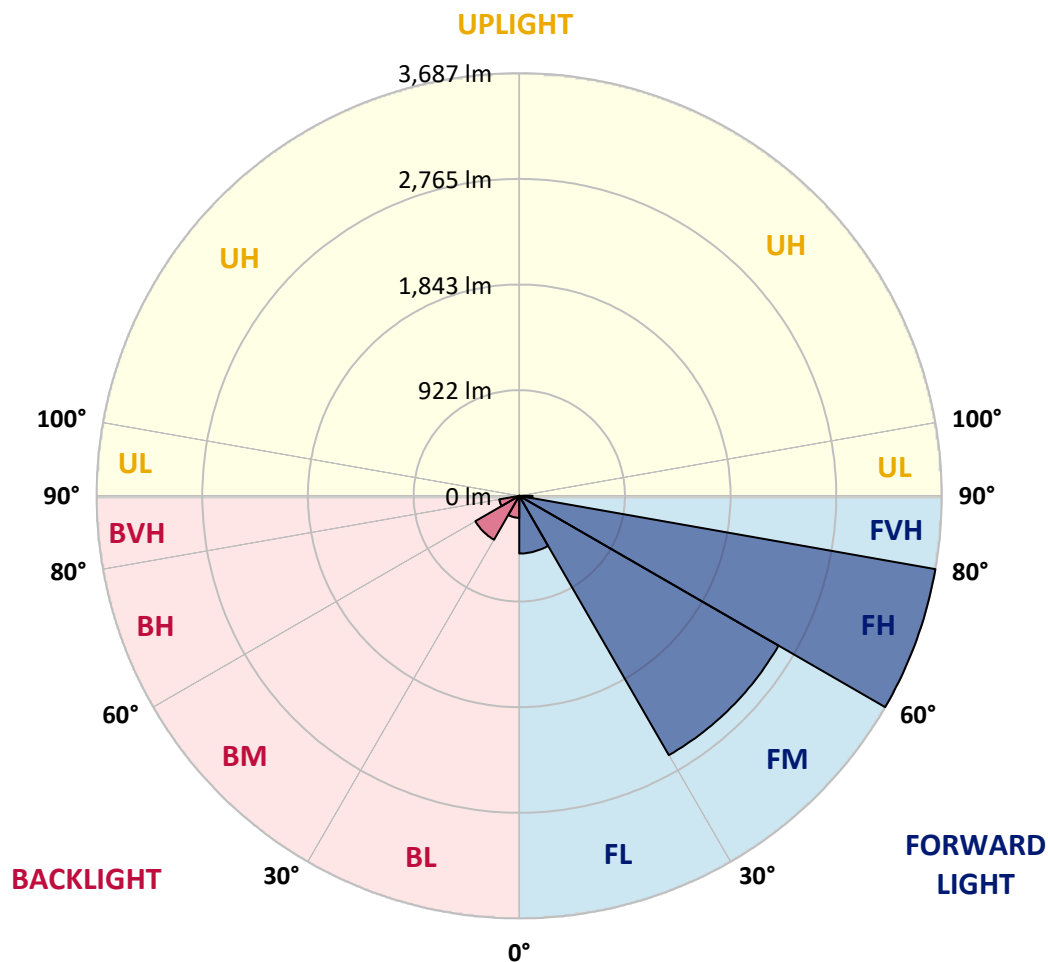
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	503.6	6.5			
FM	(30°-60°)	2612.1	33.8			
FH	(60°-80°)	3687.0	47.7			G2/5000
FVH	(80°-90°)	116.5	1.5			G2/225
BL	(0°-30°)	192.4	2.5	B1/500		
BM	(30°-60°)	441.8	5.7	B1/1000		
BH	(60°-80°)	177.2	2.3	B1/500		G1/500
BVH	(80°-90°)	1.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	847.1	847.1	847.1	847.1	847.1	847.1	847.1	847.1	847.1	847.1	847.1
2.5°	925.2	926.7	925.7	919.3	908.8	902.9	899.7	889.2	882.3	870.2	857.5
5°	1010.0	1016.4	1012.7	1000.1	980.0	965.8	961.6	939.9	920.3	897.7	871.2
7.5°	1100.3	1103.5	1096.6	1080.2	1053.4	1029.1	1025.4	995.3	964.2	929.4	893.5
10°	1178.4	1182.1	1171.6	1147.8	1117.2	1087.1	1081.9	1048.6	1011.7	968.9	923.0
12.5°	1243.8	1247.5	1233.8	1205.3	1171.6	1140.4	1135.2	1100.3	1059.6	1012.2	955.2
15°	1293.4	1300.3	1281.9	1251.2	1214.8	1183.7	1181.1	1146.8	1107.2	1054.4	993.7
17.5°	1322.5	1329.3	1311.9	1275.0	1243.8	1217.5	1214.3	1185.8	1148.9	1098.2	1031.1
20°	1327.3	1333.6	1315.1	1282.9	1257.1	1235.9	1234.4	1213.8	1186.8	1138.4	1071.8
22.5°	1313.0	1320.9	1304.0	1278.2	1260.2	1249.2	1247.0	1235.4	1220.2	1179.0	1109.9
25°	1298.3	1304.5	1291.9	1269.2	1259.7	1258.6	1260.2	1258.1	1254.9	1220.2	1154.1
27.5°	1297.1	1304.0	1289.8	1268.1	1262.9	1274.0	1275.5	1285.6	1288.2	1257.6	1196.9
30°	1306.2	1310.9	1297.1	1274.5	1271.8	1297.1	1297.6	1315.6	1319.9	1289.2	1239.1
32.5°	1325.6	1331.0	1317.2	1284.0	1280.3	1315.6	1317.2	1341.0	1347.9	1323.1	1283.4
35°	1371.6	1377.9	1362.1	1310.4	1297.1	1333.0	1337.8	1365.8	1379.4	1358.9	1329.3
37.5°	1486.0	1467.6	1446.0	1363.7	1335.7	1360.5	1368.4	1401.2	1425.4	1401.7	1384.3
40°	1770.6	1712.5	1644.9	1454.5	1403.2	1419.1	1425.4	1458.2	1491.4	1468.1	1459.7
42.5°	2197.5	2128.8	2020.2	1663.4	1505.1	1513.0	1517.7	1546.2	1593.3	1574.7	1576.9
45°	2578.0	2553.2	2442.4	2020.2	1695.6	1656.5	1662.3	1677.1	1746.3	1739.4	1753.2
47.5°	2870.3	2856.1	2770.6	2429.7	2017.5	1832.3	1848.7	1855.6	1955.3	1979.5	2016.5
50°	3095.2	3089.9	3013.4	2793.8	2438.2	2091.4	2097.3	2082.4	2231.7	2291.9	2362.1
52.5°	3307.3	3325.2	3268.7	3132.1	2887.2	2430.7	2429.7	2360.1	2561.6	2652.4	2772.2
55°	3498.8	3505.2	3511.0	3477.2	3338.9	2817.0	2807.0	2693.0	2944.2	3038.2	3168.0
57.5°	3678.8	3681.5	3733.2	3802.3	3809.2	3231.8	3213.4	3076.6	3362.2	3429.2	3508.9
60°	3799.7	3811.8	3921.0	4113.1	4197.1	3659.9	3649.8	3510.5	3787.6	3818.6	3803.9
62.5°	3625.5	3699.4	3974.8	4355.9	4563.3	4134.2	4129.5	3998.6	4235.1	4209.7	4083.1
65°	2934.7	3059.8	3544.2	4520.0	4922.7	4664.1	4670.9	4531.6	4694.7	4612.4	4310.0
67.5°	2052.9	2184.8	2758.0	4533.3	5324.3	5286.3	5325.9	5107.4	5182.8	4998.1	4363.8
70°	1419.6	1487.7	1860.8	4249.3	5637.2	6143.3	6142.3	5814.5	5668.4	5173.9	4089.4
72.5°	954.7	990.0	1208.5	3371.1	5407.2	6652.6	6622.0	6355.0	5831.9	4838.8	3341.1
75°	402.6	428.6	559.4	1894.6	4277.8	6086.3	6003.5	5616.1	5181.8	3810.2	2084.5
77.5°	127.7	138.8	220.6	678.1	2356.4	4574.9	4487.3	3507.3	3473.0	1911.4	762.1
80°	60.7	70.7	124.0	272.3	927.2	2488.3	2476.1	1591.1	1494.0	516.1	153.0
82.5°	26.3	31.2	68.6	145.7	414.8	887.6	905.6	541.4	448.0	195.8	46.9
85°	8.4	11.1	31.7	67.0	175.2	220.6	217.9	128.7	180.5	106.6	16.4
87.5°	0.0	0.0	10.6	15.3	17.9	12.7	14.2	11.1	50.1	29.5	5.8
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°	847.1	847.1	847.1	847.1	847.1	847.1	847.1	847.1	847.1	847.1	847.1
2.5°	851.3	842.8	828.0	814.3	802.2	790.0	782.6	772.0	771.0	771.0	773.7
5°	857.0	843.3	816.9	788.9	756.8	726.1	695.6	666.0	656.5	649.6	652.8
7.5°	873.9	852.3	810.6	757.3	696.1	629.0	582.1	531.5	511.9	501.3	503.0
10°	898.2	868.7	805.3	711.9	612.7	521.4	454.4	399.4	378.4	369.4	369.4
12.5°	925.2	888.7	795.8	655.5	521.4	412.2	346.8	321.4	318.3	318.3	318.3
15°	957.4	913.0	779.4	589.0	425.9	326.2	302.9	304.0	307.1	309.2	309.2
17.5°	990.6	938.8	753.6	514.6	341.4	293.5	294.0	295.5	298.2	300.3	300.3
20°	1026.4	964.7	719.3	435.4	292.8	283.9	285.5	287.1	289.2	290.3	290.8
22.5°	1065.0	988.9	678.7	357.8	276.5	276.0	276.5	278.1	280.7	280.7	281.8
25°	1106.1	1015.9	632.2	301.3	268.0	268.0	269.2	270.2	272.3	272.3	272.9
27.5°	1148.3	1040.7	583.1	271.8	260.7	260.1	260.1	261.8	262.8	263.3	263.8
30°	1194.7	1069.7	534.0	265.5	254.9	252.3	250.7	251.7	252.8	253.3	254.4
32.5°	1242.3	1097.7	490.3	268.0	249.1	244.4	239.0	238.0	238.0	240.2	241.7
35°	1295.1	1128.3	456.5	277.1	245.9	232.8	224.3	219.6	220.1	223.2	224.8
37.5°	1358.4	1165.2	431.7	285.0	243.8	219.6	205.8	200.0	196.3	200.0	199.0
40°	1441.3	1219.5	413.8	291.3	241.2	204.3	185.7	176.3	169.4	171.5	170.5
42.5°	1563.1	1305.1	406.9	291.8	235.3	186.2	165.2	152.5	142.5	143.0	140.9
45°	1734.1	1440.2	442.3	285.0	222.7	166.8	143.5	126.7	120.3	118.7	116.6
47.5°	1968.4	1637.0	524.1	270.7	204.3	147.8	122.4	108.1	103.4	100.8	99.2
50°	2282.5	1889.8	614.8	254.9	185.7	129.9	105.1	96.0	92.9	90.2	89.7
52.5°	2646.5	2146.2	689.2	239.0	167.3	114.0	93.9	88.7	86.0	83.9	83.3
55°	2980.6	2323.1	685.0	222.2	149.3	101.4	86.0	82.8	79.6	77.6	76.6
57.5°	3188.6	2347.9	564.7	203.7	128.7	91.3	78.6	76.6	72.9	70.2	69.7
60°	3284.1	2206.4	395.8	179.5	108.1	81.8	70.7	69.7	64.9	61.2	60.2
62.5°	3301.5	1943.6	263.8	149.3	90.2	72.9	62.8	61.2	54.8	48.6	45.4
65°	3230.8	1567.9	182.6	116.6	77.1	63.3	53.8	50.6	43.8	37.5	35.4
67.5°	3007.0	1100.8	127.2	83.9	65.4	50.1	42.7	41.7	36.4	31.2	29.5
70°	2596.9	627.5	85.0	62.8	51.8	34.3	33.8	34.8	29.5	25.3	23.3
72.5°	1991.2	287.1	52.8	45.9	35.4	23.3	27.0	27.5	22.7	19.0	16.9
75°	1172.1	123.0	33.2	29.5	17.9	15.3	19.5	20.1	15.3	12.1	10.6
77.5°	398.9	46.4	21.1	17.4	9.0	8.4	12.7	12.7	8.4	4.7	3.7
80°	90.8	17.4	10.6	6.9	4.2	3.7	4.2	3.7	2.2	0.5	0.0
82.5°	25.8	6.9	4.2	2.7	1.5	1.5	0.5	0.0	0.0	0.0	0.0
85°	7.4	3.2	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.2	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)